Public Utilities

Volume 59 No. 2 January 17, 1957

POSTWAR FREIGHT RATE INCREASES AND THE RAILROADS
By Robert W. Harbeson

« »

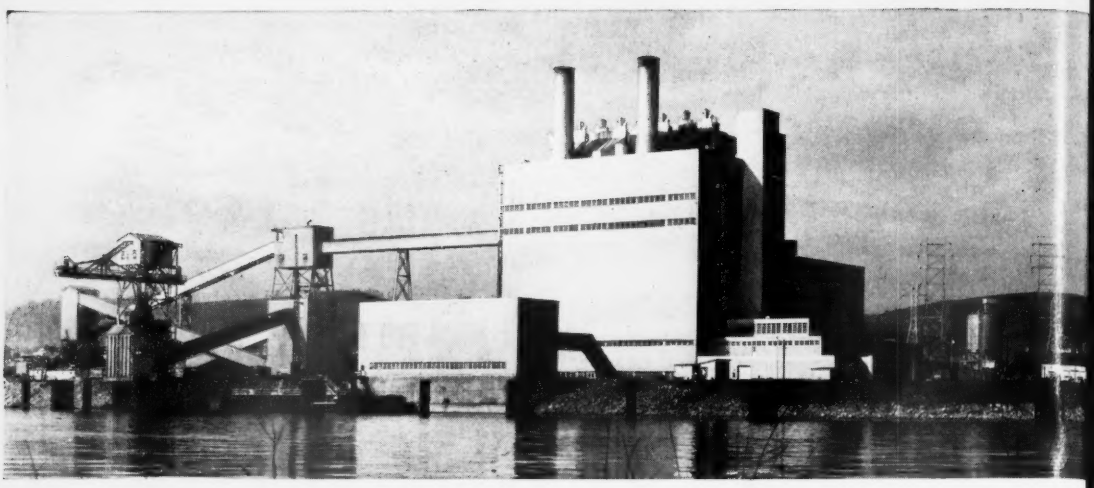
It's New and Needed—the Telephonic Fire Alarm
By James H. Collins

« »

Accountants as Regulatory Commissioners
By Lincoln Smith

« »

Judicial Back-seat Driving and Regulatory Progress



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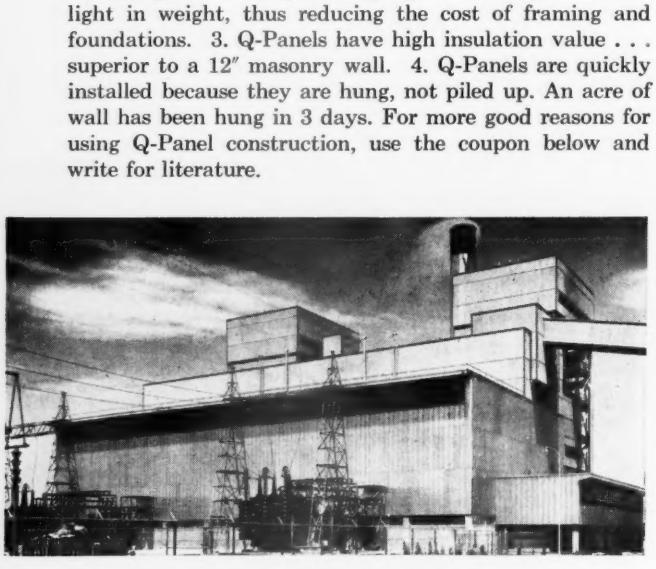

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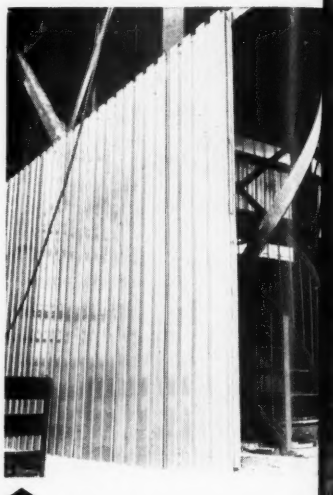

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It's New and Needed—the Telephonic Fire Alarm ..... *James H. Collins* 83
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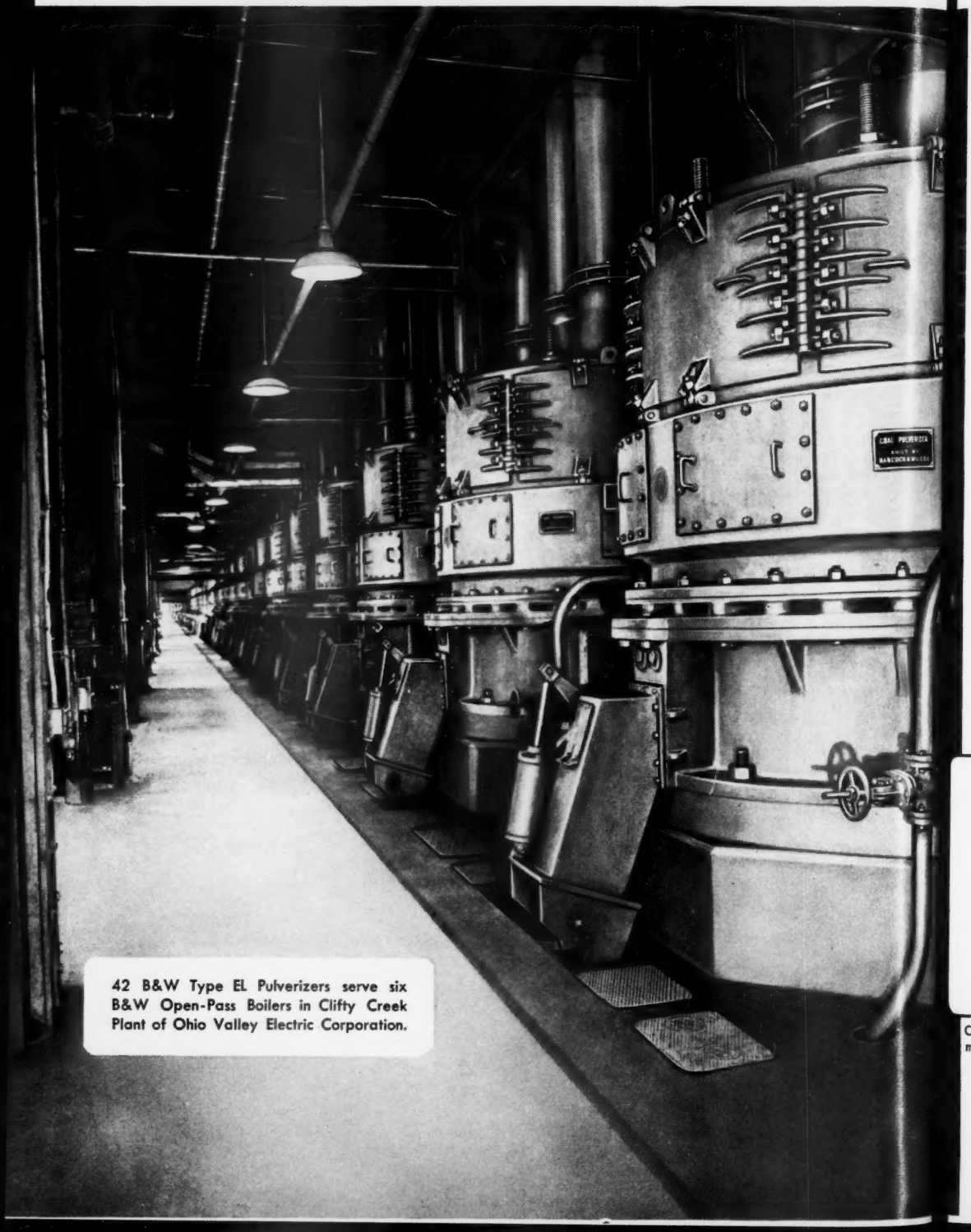

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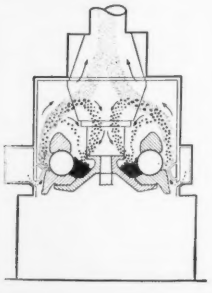

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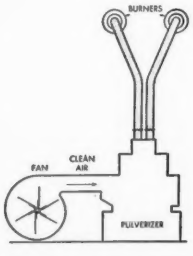

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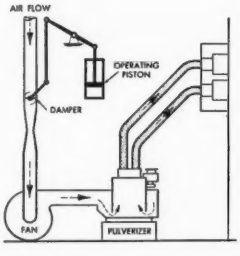

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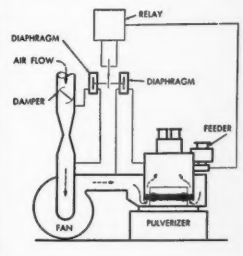

MILL LEVEL CONTROL — this automatically adjusts fuel-feed.

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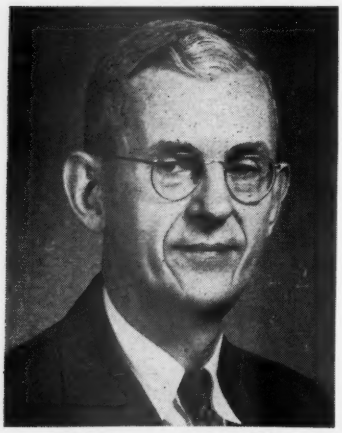
Pages with the Editors

JUST before the recent holiday season, the Interstate Commerce Commission gave the eastern and western railroads a Christmas present. It was in the form of authority for the eastern roads to increase freight rates 7 per cent and the western lines 5 per cent. As a result, on the basis of ICC estimates, the railroads should obtain additional revenues during the New Year of $402.6 million from rail shippers. An additional boost of 7 per cent, requested by the southern lines, was scheduled for hearing before the ICC this month (January).

WE were interested to note in passing that even the state utility commissioners, who sat with the ICC as a participating panel, were inclined to agree that the railroads needed more revenue. The ICC opinion accompanying the order stated:

> THE panel of state commissioners who sat with us in this proceeding and participated in the oral argument agree that there is a real and pressing need on the part of the movant railroads for additional revenue. However, the increases they would now grant would be in a somewhat lesser amount. They would limit the increases to the amount of the increased costs due to the November wage awards and the accompanying taxes. Consideration of other increased costs such as those resulting from higher prices of materials and supplies they would defer until after the further hearings in this proceeding.



ROBERT W. HARBESON

LINCOLN SMITH

THE fact that the ICC took such prompt action on the "emergency" petition of the roads, filed only eighty days previous, indicates that the regulatory process, even on such a vast and complex national level, is flexible and responsive to demonstrable needs. But the repetition of such rate increases, interwoven as they are with the upward spiraling of wages and other operating costs, naturally raises the question of whether there are alternatives and whether such alternatives are being considered and explored.

SOME public utility industries other than the railroads have a very definite interest in this matter in their capacity as major shippers. The electric utilities, for example, have moved into first place as the coal industry's biggest customer in the United States. That makes them sensitive to any freight rate increase affecting the shipping of that commodity and it is noted that the recent ICC order especially provided for a flat 10 cents per ton increase on line-haul shipments of coal and coke.

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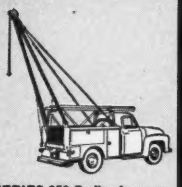

SERIES 350 Bodies have an under-floor winch, a fold-over derrick, and an extension ladder. Compartments are equipped to carry a variety of service tools, parts, and materials.

SERIES 25 Bodies are available in standard models equipped specifically for telephone, electric, gas, or water meter installation and service.

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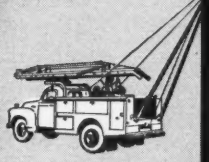

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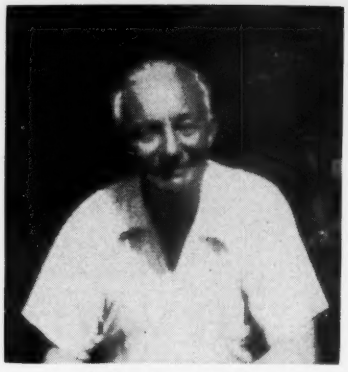
THE opening article in this issue is a thoughtful analysis of the economic factors involved in postwar freight rate increases and their effects on railroads and shippers alike. It is written from the objective standpoint of a well-known economist who has long specialized in railroad rate-making matters. ROBERT W. HARBESON, author of this article on railroad freight rates, is a native of Ohio and a professor of economics at the University of Illinois. He was educated at Western Reserve University (AB, '25) and Harvard University (AM, '26; PhD, '31).

PRIOR to going on the University of Illinois faculty, PROFESSOR HARBESON had extensive teaching experience at Rutgers University and other institutions. He also served as transportation economist for the federal government, first with war agencies and later as principal economist in what is now the Bureau of Accounts, Cost Finding, and Valuation of the Interstate Commerce Commission. He is joint author of several government reports and author of about forty articles in the field of transportation and of public utilities.

* * * *

OUR readers in the telephone industry, as well as others, will find of special interest the article on the use of the telephone for reporting fire alarm, police, and other emergencies, which begins on page 83. It is the product of JAMES H. COLLINS, business author and editor, now resident in Washington, D. C. Just lately the first American city replaced its old telegraphic fire-alarm boxes with a telephonic system, leased from the telephone company—with many advantages. But for years citizens have been using the private phone for fire and other emergency calls. This system puts the phone out in the street—and is a new kind of service to sell. It is not generally realized that regardless of the type of alarm used for reporting fire, police, and other emergencies, from street corner boxes, the great bulk of emergency calls in recent years have come over the telephone wires from citizens using conventional telephone service.



JAMES H. COLLINS

DR. LINCOLN SMITH, assistant professor of political science at New York University (see article entitled "Accountants as Regulatory Commissioners," beginning on page 93), has analyzed another special aspect of public service commission regulation in practice. The author's discussion of qualifications for a public service commissioner underlines the varied type of demands made on the state commissions. They are expected at various times to consider matters ordinarily falling in the specialized fields of lawyers, accountants, writers, and occasionally engineers. Of course, a member of any of these professions can find good use for his specialized services on any public service commission.

DR. SMITH is a native of Maine and a graduate of Bowdoin College, with a PhD from the University of Wisconsin. He is a specialist in public law and public administration and has written one book and many articles in the field of regulatory administration. His article in this issue about accountants as regulatory commissioners is one of a series of four studies he is making on the respective rôles of professional vocations in public utility regulation. His study about lawyers was published in the November 11, 1954, issue of PUBLIC UTILITIES FORTNIGHTLY.

THE next number of this magazine will be out January 31st.

The Editors

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(January 31, 1957, issue)

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THE CASE OF THE MISSING MILLIONS

What happens to the so-called tax savings which the customers of government-owned and -operated public utilities are supposed to enjoy as a result of total or partial tax exemption for the operation of such agencies? Proponents of public ownership generally assume that the ultimate consumer is the real beneficiary. Private enterprisers emphasize the alleged "unfairness" by suggesting that other taxpayers contribute indirectly for the "lost" taxes resulting from the exemption. But has anyone ever tried to follow the tax exemption dollar from beginning to end to see what happens to it either as a benefit or a detriment? John Alden Bliss, economic consultant of New York, has undertaken an interesting and rather original approach to this statistical mystery.

THE CHANGING EXPENSE PATTERN OF THE ELECTRIC UTILITIES

During the past few years production expenses for steam-generating electric companies dropped ten cents on the dollar. How did this come about? What happened to the saving? Did the consumer get it or the stockholders or the government or a combination of all three? Franklin H. Cook, professor of business law at the Pennsylvania State University, has made a careful study of the comparative operation of the electric utilities for purposes of determining the explanation of this changing pattern of expenses of electric utility companies and what it portends for the future development of the industry. It is a thought-provoking study which should interest regulatory and professional as well as management readers.

HOW IMPORTANT ARE INTEREST RATES?

The high plateau for money rates in all categories of debt has held fairly steady in recent weeks. Most financial economic experts are predicting a continuation of the "tight money" situation, at least for the first half of 1957. Willard F. Stanley, former utility executive and financial writer of New York city, gives us a succinct explanation of this timely topic from the standpoint of public utility finance. It will mean much in the decisions of utility management in the months to come.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***

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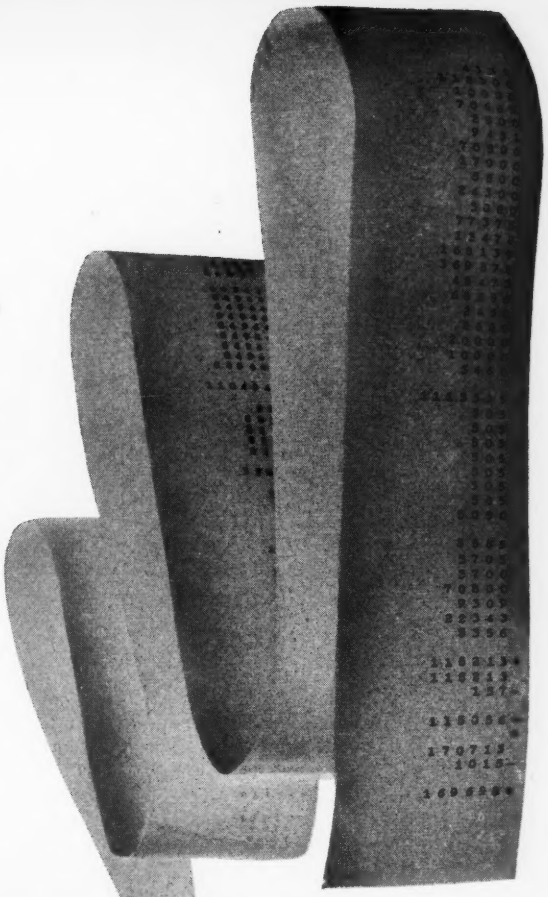

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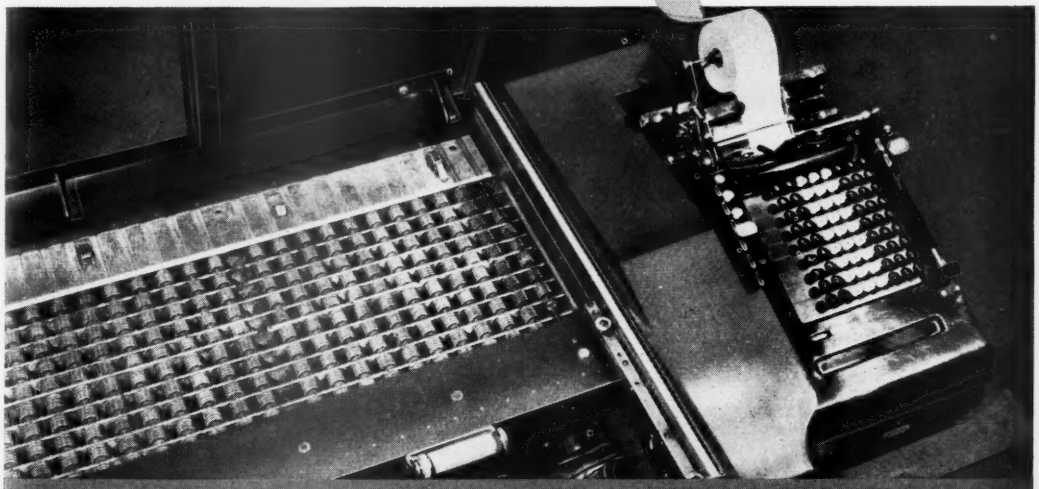

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EDITORIAL STATEMENT
The Economist.

"The overriding recipe for more social justice and for economic betterment is, on every count, the growth of national wealth; and every prescription for 'reform' which hinders instead of helping that growth denies the very purposes for which the Labour party, in the radical tradition, claims to exist. The green light should be for expansion, not for envy."

Excerpt from First National City Bank Monthly Letter, published by The First National City Bank of New York.

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Secretary of the Treasury.

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,000,000	**HOUSTON, TEX.†** Var. Rates Bonds, Due 1957-81
,133,000	**KANSAS CITY, MO.†** Var. Rates Bonds, Due 1957-76
,000,000	**LOS ANGELES, CALIF.†** Var. Rates Bonds, Due 1957-76
,000,000	**MAHONING VALLEY SANITARY DIST., OHIO** 3% Bonds, Due 1957-76
,245,000	**MEMPHIS, TENN.†** Var. Rates Rev. Bonds, Due 1963-77 & 1992
,000,000	**MICHIGAN, STATE OF† (2 issues)** Var. Rates Rev. Bonds, Due 1957-79
,648,000	**NASSAU COUNTY, N.Y.†** 3.40% Bonds, Due 1957-85
,000,000	**NEW JERSEY HIGHWAY AUTHORITY†** 4⅛% Rev. Bonds, Due 1988
,550,000	**NEW ORLEANS, LA.** Var. Rates Bonds, Due 1957-95
,624,000	**NEW YORK SCHOOL DISTRICTS** Var. Rates Bonds, Due 1956-86 (20 issues)
,000,000	**OHIO, STATE OF†** Var. Rates Rev. Bonds, Due 1956-72
,026,000	**OKLAHOMA CITY, OKLA.† (2 issues)** Var. Rates Bonds, Due 1958-81
,000,000	**OMAHA SCHOOL DISTRICT, NEBR.†** Var. Rates Bonds, Due 1958-77
,000,000	**PENNSYLVANIA, GEN. STATE AUTHORITY** Var. Rates Bonds, Due 1958-82
,000,000	**PHILADELPHIA SCHOOL DIST., PA.†** Var. Rates Bonds, Due 1958-81
,152,000	**PHILADELPHIA, PA.† (2 issues)** Var. Rates Bonds, Due 1957-87
,250,000	**POWER AUTHORITY OF STATE OF N.Y.†** Var. Rates Rev. Bonds, Due 1961-85
,000,000	**SALT RIVER PROJECT, ARIZ.†** Var. Rates Bonds, Due 1960-87
,000,000	**TACOMA, WASH.** Var. Rates Rev. Bonds, Due 1959-79
,200,000	**TULSA, OKLA. (2 issues)** Var. Rates Bonds, Due 1958-81
,000,000	**WASHINGTON COUNTY, MD.** 3% & 2.90% Bonds, Due 1957-81
,421,000	**YONKERS, N.Y.†** 3.30% Bonds, Due 1957-76
,643,750	**ADDITIONAL TAX-EXEMPT BONDS— (120 Issues)**

Amount of Issue	*Corporate*	Underwriting Interest
$250,000,000	**AMERICAN TELEPHONE AND TELEGRAPH COMPANY†** 34 Year 3⅞% Debentures, Due July 1, 1990	$23,150,000
35,000,000	**BELL TELEPHONE COMPANY OF PENNSYLVANIA** 40 Year 3¼% Debentures, Due March 1, 1996	7,950,000
11,430,000	**BOSTON AND MAINE RAILROAD EQUIPMENT TRUST, SERIES 1,** 4½% Certificates, Due 1957-71	4,755,000
13,800,000	**CHESAPEAKE AND OHIO RAILWAY EQUIPMENT TRUSTS OF 1956** 3⅜% & 3⅞% Certificates, Due 1957-71	5,925,000
40,000,000	**THE COLUMBIA GAS SYSTEM, INC.** 3⅞% Debentures, Series F, Due 1981	5,450,000
40,000,000	**COMMONWEALTH EDISON COMPANY** First Mtge. 3½% Bonds, Series R, Due 1986	6,750,000
40,000,000	**CONSUMERS POWER COMPANY** First Mtge. Bonds, 4% Series due 1986	6,700,000
10,000,000	**DALLAS POWER & LIGHT COMPANY** First Mtge. Bonds, 4¼% Series due 1986	3,300,000
9,030,000	**ERIE RAILROAD EQUIPMENT TRUSTS OF 1956 & 57** 3⅜% & 4¼% Certificates, Due 1957-72	3,630,000
20,000,000	**GENERAL TELEPHONE COMPANY OF CALIFORNIA** First Mtge. Bonds, Series J, Due 1986 (4½%)	4,350,000
15,000,000	**GULF STATES UTILITIES COMPANY** First Mtge. Bonds, 4¼% Series due 1986	4,000,000
30,000,000	**HOUSTON LIGHTING & POWER COMPANY** First Mtge. Bonds, 3¼% Series due 1986	9,600,000
10,000,000	**INDIANAPOLIS POWER & LIGHT COMPANY** First Mtge. Bonds, 3⅜% Series, due 1986	7,550,000
11,250,000	**LOUISVILLE AND NASHVILLE RAILROAD EQUIPMENT TRUSTS, SERIES O & P,** 3 & 3⅞% Ctfs., Due 1957-71	3,825,000
20,000,000	**LONG ISLAND LIGHTING COMPANY** First Mtge. Bonds, Series I, 4¾%, Due 1986	4,350,000
23,000,000	**MISSOURI PACIFIC RAILROAD COMPANY** Collateral Trust 4¼% Notes due 1976	2,760,000
22,481,000	**MONTREAL, THE CITY OF (CANADA)†** 4¼% & 4½% U.S. Debentures Due 1958-76	2,450,000
11,500,000	**MONTREAL TRANSPORTATION COMMISSION†** 4⅜% Sinking Fund Debentures, Due 1976	950,000
25,000,000	**MOUNTAIN STATES TELEPHONE AND TELEGRAPH COMPANY** 34 Year 3½% Debentures, Due June 1, 1990	4,900,000
15,000,000	**NORTHERN ILLINOIS GAS COMPANY** First Mtge. Bonds, 3¾% Series due 1981	12,750,000
50,000,000	**PUBLIC SERVICE ELECTRIC AND GAS COMPANY** First & Ref. Mtge. Bonds, 4⅛% Series due 1986	6,600,000
60,000,000	**SOUTHERN BELL TELEPHONE AND TELEGRAPH COMPANY** 27 Year 4% Debentures, Due October 1, 1983	6,150,000
40,000,000	**SOUTHERN CALIFORNIA GAS COMPANY** First Mtge. Bonds, Series B, due 1981 (3⅞%)	10,150,000
35,000,000	**SOUTHERN PACIFIC COMPANY** First Mtge. Bonds, 5¼%, Series H, Due 1983	5,150,000
9,600,000	Equip. Trust Ctfs., Series VV, 4% Due 1957-71	2,775,000
80,000,000	**TENNESSEE GAS TRANSMISSION COMPANY†** First Mtge. Pipe Line Bonds, 4¾% Ser. due 1976 & 4½% Debentures due January 1, 1977	4,168,000
10,000,000	**TEXAS POWER & LIGHT COMPANY** First Mtge. Bonds, 4⅛% Series due 1986	6,550,000
23,350,000	**ADDITIONAL PUBLIC UTILITY BONDS** (5 issues)	11,850,000
71,823,000	**ADDITIONAL EQUIPMENT TRUST CERTIFICATES— (18 issues)**	37,258,000

Descriptive circulars or prospectuses, where available, and current quotations will be supplied for any of these securities upon request.

**To December 19, 1956 †Issue headed jointly by Halsey, Stuart & Co. Inc. and others. All other issues were headed by Halsey, Stuart & Co. Inc. alone. Not included in these compilations are issues in which Halsey, Stuart & Co. Inc. participated only as a member of an account.*

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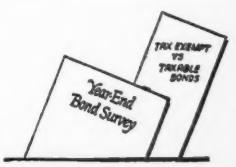

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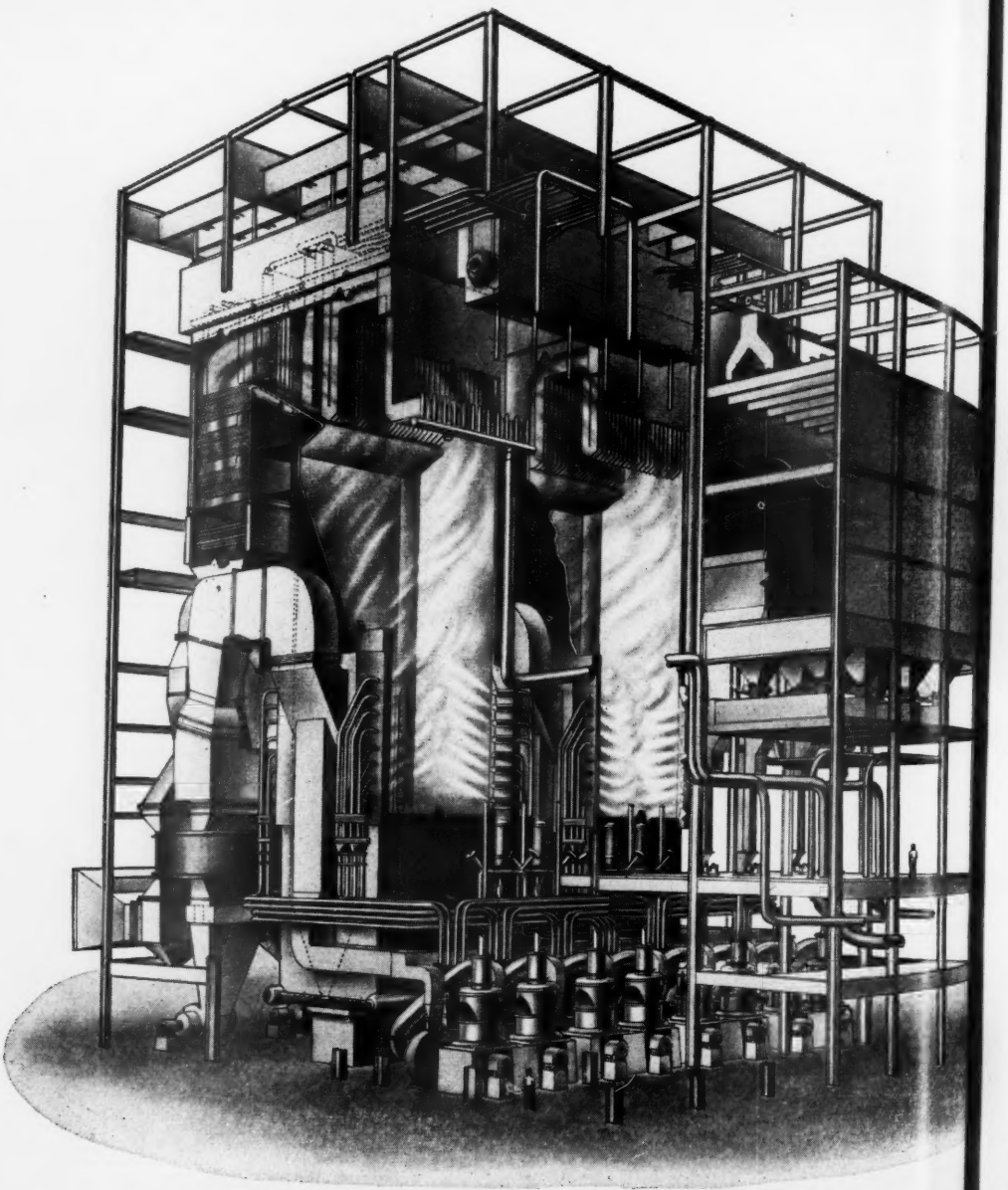

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5. The volume of each furnace can be properly proportioned to the heating surface it contains without the use of internal dividing walls. All walls are accessible for cleaning.
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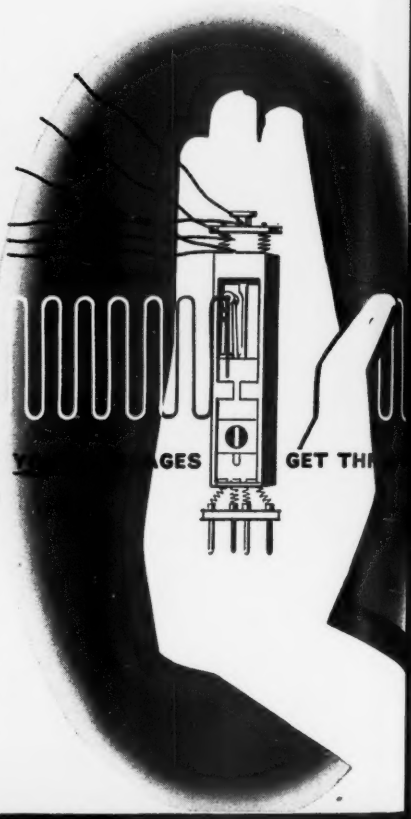

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JANUARY-FEBRUARY

Thursday—17 *National Housewares and Home Appliance Manufacturers Exhibit begins, Chicago, Ill.*	**Friday—18** *Edison Electric Institute, Industrial Power and Heating Group, ends 2-day meeting, New Orleans, La.*	**Saturday—19** *American Women in Radio and Television, Atlanta Chapter, begins meeting, Atlanta, Ga.*	**Sunday—20** *National Association of Home Builders begins meeting, Chicago, Ill.*
Monday—21 *American Institute of Electrical Engineers begins winter general meeting, New York, N. Y.*	**Tuesday—22** *Southwest Shippers Advisory Board begins meeting, San Antonio, Tex.*	**Wednesday—23** *New England Gas Association, Operating Division, begins meeting, Boston, Mass.*	**Thursday—24** *American Marketing Association begins seminar on public utilities marketing, Dallas, Tex.*
Friday—25 *Pennsylvania Gas Association begins midwinter sales conference, Philadelphia, Pa.*	**Saturday—26** *National Association of Purchasing Agents, Public Utility Buyers Group, will hold meeting, Louisville, Ky. Feb. 3-5.* ***Advance notice.***	**Sunday—27** *Western Winter Radio-Television and Appliance Market will hold western merchandise mart, San Francisco, Cal.* ***Advance notice.***	**Monday—28** *Industrial Heating Equipment Association begins meeting, Washington, D. C.*
Tuesday—29 *American Water Works Association, New York Section, holds midwinter luncheon, New York, N. Y.*	**Wednesday—30** *American Welding Society begins annual midwest welding conference, Chicago, Ill.*	**Thursday—31** *Pennsylvania Electric Association, Transmission and Distribution Committee, begins meeting, Harrisburg, Pa.*	**FEBRUARY** **Friday—1** *Ninth Annual Industrial Engineering Institute begins, University of California; simultaneous session in Berkeley and Los Angeles, Cal.*

Courtesy, Bell Telephone Laboratories

New-type Street Corner Emergency Telephone

(See article page 83.)

Public Utilities
FORTNIGHTLY

VOL. 59, NO. 2 JANUARY 17, 1957

Postwar Freight Rate Increases And the Railroads

This is a very timely discussion of the pros and cons involved in railroad freight rate increases and their impact on the financial position of the American railroads. It is not generally realized that these freight rate increases have an effect not only upon the railway carriers themselves but upon public utility companies which are heavy users of the rail freight services.

BY ROBERT W. HARBESON*

THE number and cumulative magnitude of the nation-wide general increases in railway freight rates which have been granted during the past eleven years are without parallel in any previous period of similar length since the establishment of federal regulation of railways. For the third time within a year and for the seventh time since World War II (not counting interim adjustments) the railways have petitioned for general increases in freight rates. Excluding the two pending proceedings† the carriers sought increases totaling 113.5 per cent over June 30, 1946, and were

*Professor of economics, University of Illinois. For additional personal note, see "Pages with the Editors."

† EDITOR'S NOTE: The Interstate Commerce Commission, on December 17, 1956, granted emergency rate increases of 5 per cent in the western district, 7 per cent in the East (including the Pocahontas region), and 5 per cent interterritorially, subject in each case to various hold-downs. The increase is estimated to yield $402.6 million annually.

granted increases totaling 88.8 per cent. The details concerning these increases are shown in Table I, page 75.

The petition of September 27, 1956, which was docketed as Ex Parte No. 206, calls for an additional 15 per cent increase in the eastern and western districts, equivalent, after allowing for hold-downs, to 11.6 per cent for the United States as a whole. This request differs from the others in two respects. First, the southern lines (along with the Lackawanna and Virginian) did not join in the application although they have been included in the resulting investigation by the commission and presumably will receive whatever increase in rates the commission decides to prescribe for the other territories. Second, the justification offered for the increase was not, as previously, the need for additional revenue to offset rapidly rising labor and material costs but the need for an increase in the permitted rate of return so as to improve the carriers' credit and enable them to attract capital on favorable terms.

THE foregoing petition stated that a further increase might be requested to offset prospective increases in wages and other costs. On November 6, 1956, following a wage settlement with the nonoperating employees, the eastern and western lines filed a petition for an additional 7 per cent increase, subject to various hold-downs, on an emergency basis to offset higher costs. On November 14th, the southern lines joined in the petition for a 7 per cent emergency increase, but with hold-downs limited to coal and coke. It has been estimated that the proposed increase, after allowing for hold-downs, is 6.14 per cent for the United States as a whole. Presumably the commission will reach a decision with respect to the emergency increase before reaching a decision with respect to the proposed 15 per cent increase. The frequency and cumulative magnitude of the postwar rate increases, certain special features of the pending proposals, and the arguments advanced in support of the latter make it desirable at this time to consider the merits of the railways' case and the general problem of how best to assure an adequate level of railway earnings.

In the writer's opinion the railways have established their need for increased revenue in both the earlier and current proceedings, but as will be emphasized below, this conclusion does not imply complete endorsement of the carriers' arguments in support of the increases or of the manner in which it was proposed to secure the increased revenue. Among the considerations supporting the foregoing conclusion concerning the carriers' need for increased revenue are the following:

1. THE railroads' rate of return, whether measured in relation to total investment or in relation to the owners' equity, is much lower than that enjoyed by other regulated industries, despite the fact that the latter involve risks comparable to, or less than, those of the railroads. For example, the ratio of net income to owners' equity for leading corporations in 1955, as computed by the First National City Bank of New York, was 5.7 per cent for railroads, 9.5 per cent for telephone and telegraph companies, 9.9 per cent for electric power and gas utilities, and 9.7 per cent for public utilities as a group. Likewise, the ratio of dividends to net worth in 1953 was 1.95 per cent for rail-

roads, 3.64 per cent for other transportation companies, 5.80 per cent for communication utilities, 5.75 per cent for electric and gas utilities, and 3.33 per cent for other public utilities.[1] Concerning these ratios Professor Walter Morton, supporting the increase, stated:

> I do not regard the dividend rate as important as the earnings rate (on net worth) because there must be considerable latitude on the part of management concerning the proportion of earnings retained in the business. But the dividend rate taken together with the earnings rate is rather conclusive regarding the inadequacy of railroad earnings. The dividend rate on equity capital has been less than on almost any other type of security, less than on high-grade industrial bonds, and for the most part less than that on government securities. This, in itself, would not be so inimical to the investor if the retained earnings were being invested in a business earning a good or even average rate of profit. When, however, the funds must be reinvested merely to prevent a low level of earnings from going lower, the railroad investor is obviously not receiving treatment that would be considered reasonable by any standard.[2]

2. THE investment standing of railway debt capital is relatively poor compared with that of other industries. This is brought out by Table II, page 77, which is taken from a statement supporting the Ex Parte No. 206 proposal prepared by C. L. Bergmann, an investment banker.

3. THE average annual capital expenditure for roadway and structures was $335 million for the period 1946-55.[3] If this figure were adjusted by the relevant construction cost index the expenditure would certainly be no more, and possibly less, than the expenditure for this purpose during the years 1931-40, a period of generally depressed earnings. In view of the importance of these expenditures for the provision of adequate facilities and for improving efficiency of operations, and in view of the unavailability of any device analogous to the equipment trust for financing expenditures on roadway and structures, there is a demonstrable need for a level of earnings which would permit larger expenditures for these purposes.

4. BETWEEN 1946 and 1955 long-term debt other than equipment obligations was reduced by $525 million but total debt including equipment obliga-

TABLE I

POSTWAR GENERAL RAILROAD FREIGHT RATE INCREASES
PERCENTAGE INCREASE OVER JUNE 30, 1946

	Sought by Carriers		*Authorized by ICC*	
Proceeding	*Each Case*	*Cumulated*	*Each Case*	*Cumulated*
Ex Parte 162, 1946	19.6	19.6	17.6	17.6
Ex Parte 166, 1948	29.4	55.0	22.6	44.2
Ex Parte 168, 1949	12.4	74.2	9.1	57.3
Ex Parte 175, 1952	14.5	99.5	13.8	78.9
Ex Parte 196, 1956	7.0	113.5	5.5	88.8
Ex Parte 206, 1956 (Sept.).	11.6	138.3		
Ex Parte 206, 1956 (Nov.).	6.1	152.9		

Source: Verified Statement No. 1 by G. E. Getty, in Ex Parte No. 206, Increased Freight Rates, Eastern and Western Territories, 1956, p. 13, Ex Parte 206 data added.

tions increased by $570 million. Fixed and contingent interest charges fell by $9 million but annual instalment payments on equipment obligations rose by $190 million. Instalments absorbed 69 per cent of depreciation charges in 1946 and 90 per cent in 1955.[4]

Although the indentures covering equipment obligations call for the amortization of these securities over a relatively short period of time, it would seem to be highly desirable that the total burden of debt be at least not increased, in order to insure that earnings will cover interest and instalment charges by a safe margin. Hence funds should be made available to finance the purchase of needed additional equipment without resort to borrowing.

5. Maintenance expenses per 1,000 gross ton miles, adjusted for wage and price changes, fell from $1.36 in 1950 to $1.14 in 1955,[5] thus indicating the possibility of some trend toward deteriorating standards of maintenance.

While the foregoing and other data support the conclusion that the railways have established their need for increased revenue in the pending and earlier rate increase proceedings, the specific proposals of the carriers for securing the needed revenue and the arguments advanced in support of these proposals are open to criticism on several grounds.

First of all, presumably for tactical reasons, the railways have exaggerated the weakness of their financial position. While it would be desirable to strengthen the over-all financial conditions of the railroads, the writer finds no convincing evidence prior to the recent application for an emergency increase that the present condition of the industry was critical or that it had materially deteriorated in recent years. On the contrary, there is evidence that the carriers as a whole have been in a somewhat stronger financial position in recent years than in the earlier years of the postwar period. That this is the case is shown by the margin of coverage of fixed charges and by the ratios of net railway operating income and net income, respectively, to gross revenue. The former ratio shows the percentage of gross available for investors—stockholders and bondholders—collectively; the latter shows the amount available for dividends, reserves, and reinvestment. These data are shown in Table III, page 79.

In this connection the railways claim that their current net railway operating income, and hence rate of return, is overstated, in that it reflects a tax deferral resulting from accelerated amortization of defense projects which will be offset by higher taxes after the amortization period has expired. The overstatement was claimed to be 18.6 per cent of net railway operating income for 1955.[6] The Interstate Commerce Commission in 1951 rejected the carriers' proposal that the accounts be restated to show the taxes which would have been paid had accelerated amortization not been taken, on the ground that the resulting net railway operating income

> would not be a true picture of carrier earnings after income taxes actually assessed and paid. If the amortization allowances provided an incentive to plant expansion, as represented to us, it was because lower tax payments left funds to be applied during the amortization period toward the purchase of certified

TABLE II

CLASSIFICATION OF CORPORATION BONDS BY MOODY'S RATING SERVICE

Classification: Per cent which par value of bonds in each class of total par value of bonds

	Railroads	*Utilities*	*Industrials*
AAA	4.3	16.7	14.9
AA	13.3	47.2	29.6
A	22.6	28.2	23.7
Subtotal	40.2	92.1	68.2
BAA, BA, B, CAA	59.7	7.9	31.9

Source: Verified Statement No. 22 by C. L. Bergmann, in Ex Parte No. 206, Increased Freight Rates, Eastern and Western Territories, 1956, Appendix, p. 1.

facilities. The carriers' objective was to avoid what they considered an unduly favorable showing of current earnings, but net income results from transactions which actually occur, not from allowances for expenditures which would have been made under other circumstances.[7]

Furthermore, under present conditions there is no more reason to regard the provision for accelerated amortization of defense projects as temporary than other provisions of the federal tax laws. If this provision is continued and if an amount equal to the amortization allowances continues to be reinvested in property subject to amortization, the so-called tax deferral will become a true tax saving. This point has been recognized by the Civil Aeronautics Board and the committee on accounts and statistics of the National Association of Railroad and Utilities Commissioners.[8]

In the second place, the railroads have not exhausted all measures for increasing revenue which are alternatives to increasing the general level of rates. For example, they might well explore the possibility of further reductions in the passenger service deficit by dropping unprofitable trains, introducing new types of passenger trains, increasing fares, or other measures. The need of the carriers for increased freight revenue will be affected in some degree by the action taken on the pending proposals for a nation-wide increase of 7 per cent in Pullman charges, for increases in passenger fares in eastern and western territories, for an increase in

mail pay in eastern territory, for a nation-wide increase of 4 per cent in express rates, and for an additional 15 per cent increase in express rates within eastern territory.

Again, the carriers should consider further the possibilty of increasing revenues by raising rates which fail to cover out-of-pocket cost. A study of the Interstate Commerce Commission's Bureau of Accounts, Cost Finding, and Valuation reveals that, based on a one per cent sample of traffic for the United States as a whole in 1953, 41 out of 257 commodity classes, representing 18.27 per cent of the tons carried and 10.57 per cent of the ton miles, yielded revenues below long-run out-of-pocket cost. The same was true of 38 commodity classes within official territory, 38 within western territory, 10 moving from official to western territory, and 26 moving from western to official. On traffic moving within official and western territories and between these territories the revenue loss, based on a one per cent waybill sample and measured in relation to long-run out-of-pocket cost, was $1,826,580, an amount equal to 8.6 per cent of the revenue contribution to overhead made by the commodity classes which more than covered their long-run out-of-pocket cost.[9]

THIRD, and of great importance, the poor over-all financial showing of the railway industry reflects to an appreciable extent the so-called weak-and-strong-road problem. The nation-wide and territorial data presented by the railroads in the present proceeding conceal important differences in the financial condition of roads considered individually or by territorial subgroups. For example, the coverage of fixed charges by 42 large roads, accounting for 87.3 per cent of the total railway income available for fixed charges and 85.4 per cent of the fixed charges, ranged from .89 times to 27.98 times in 1955.[10] Likewise, as shown in Table IV, page 81, the rate of return earned in the eastern district in 1955 is affected by the very low rate of return earned in the New England region and that shown for the western district is affected by the low return earned in the northwestern region.

THE carriers estimate that the full 15 per cent increase proposed in the pending proceeding, Ex Parte No. 206, will yield the following rates of return, based on the traffic volume of the year ending June 30, 1956:[11]

Eastern District, Excluding Pocahontas Region	5.56%
Eastern District, Including Pocahontas Region	6.14
Western District	5.76
United States	6.06

No estimate of the rate of return for the southern region was prepared by the railroads since the southern lines did not join in the petition for increased rates. However, on the basis of the carriers' revenue estimates, it can be shown that if the full 15 per cent increase were granted the rate of return in the southern region would be increased to 6.74 per cent merely as a result of the southern lines sharing in the higher rates applying on traffic to, from, and via the southern region, even though the increase in rates was not applicable within that region. If the requested increase were made applicable to the entire country the rate of return for the United States would be increased to 6.40 per cent and in the southern region to 9.25 per cent.

On the basis of the foregoing facts the writer reaches two conclusions. First, the strong-and-weak-road problem is to a considerable extent a strong-and-weak-territory problem. Second, nation-wide application of the full 15 per cent increase requested in Ex Parte No. 206 would yield excessive returns in the southern and Pocahontas regions. The rate of return which would be earned by the southern lines if the 15 per cent increase were made applicable within the southern region would materially exceed the 8 per cent return which Professor Walter Morton, who prepared one of the principal statements in support of the railroads' petition in Ex Parte No. 206, regards as adequate.[12] The same statement is even more applicable to the Pocahontas region, where, in 1955, without the proposed increase, the rate of return was 8.59 per cent.

In view of this showing the commission might well hesitate to approve even the nominal 5 cents per ton increase in coal rates proposed by the carriers, since a large part of the resulting increase in revenue would accrue to the Pocahontas lines. It should also be noted that the rate of return earned in the southern region in 1955 was almost identical with that which the railroads estimate would be earned in the eastern district (excluding Pocahontas) if the proposed 15 per cent increase were granted.

If the commission should seek to avoid the foregoing result by confining the increase to the eastern and western districts, as the carriers propose, it faces another serious difficulty. Such action would destroy the equality of class rates in the area east of the Rockies, a result only recently secured after long and arduous effort. Increasing commodity rates without increasing class rates would cause such a wholesale disruption of competitive relationships as to be impracticable. Hence the commission faces a dilemma: scrap the result of the Class Rate case or intensify the strong-and-weak-road and strong-and-weak-territory problem. This is a situation which the present writer, in a discussion of the Class Rate case six years ago, predicted might arise.[13] Furthermore, a statement in the Supreme

TABLE III

SOME MEASURES OF RAILWAY FINANCIAL CONDITION
(Class I Railroads)

	Rates of Net Railway Operating Income to Gross Revenue	*Rates of Net Income to Gross Revenue*	*Number of Times Fixed Charges Were Covered*
1955	11.2	9.2	3.58
1954	9.3	7.3	2.88
1953	10.4	8.5	3.35
1952	10.2	7.8	2.98
1951	9.1	6.7	2.76
1950	11.0	8.3	2.94
1949	8.0	5.1	2.14
1948	10.4	7.2	2.76
1947	9.0	5.5	2.21
1946	8.1	3.8	1.69

Source: Computed from annual issues of Association of American Railroads, "Review of Railway Operations," and from Interstate Commerce Commission, "Statistics of Railways."

Court's opinion in the Class Rate case suggests that if the commission increases rates in the southern region along with rates in the other territories, under the circumstances described, its action could be challenged on legal grounds. The statement referred to is as follows (read "southern" for "eastern"):

> The authority of the commission to increase rates in order to remove discrimination, even though existing rates may be compensatory, is not unlimited. . . . We may assume, however, that if the rates of return of the eastern carriers were substantially above that for the South and the West, an increase of the rates of the former would not be be permissible, even in order to remove a discrimination.[14]

UNTIL action is taken to alleviate the strong-and-weak-road problem any decision with respect to a general increase in rates must be based upon a compromise between providing aid for weak roads and avoiding excessive returns for strong roads. This is at best an unsatisfactory procedure and is particularly undesirable when, as at present, it augments other factors making necessary large and frequent general rate increases. The situation can be alleviated in several ways. First, the commission should at once explore the feasibility of making more extensive use of its power to modify the division of joint rates so as to take account of the revenue needs of the lines concerned.[15] Second, and more important, Congress should at once remove any doubt concerning the commission's authority to require the pooling of revenues from general rate increases. Finally, well-planned consolidations might help, but to be effective this would probably require granting the commission powers of compulsion—a controversial matter—and in any event could not provide immediate relief.

FOURTH and finally, the cost-of-capital theory upon which the railroads rely to justify the rate of return which they claim to be essential is open to criticism. The cost of capital is based upon the yields of bonds and preferred stock and the earnings-price ratio of common stock. Professor Morton's conclusion, referred to above, that 8 per cent was a fair rate of return for railroads was arrived at on this basis. However, this procedure involves circular reasoning. The lower the present and prospective earnings the higher will be the cost of capital and vice versa. Thus if the commission accepted Professor Morton's conclusion and if rates were increased sufficiently to produce an 8 per cent return, assuming that this were possible, the cost of capital would fall below 8 per cent and a reduction in rates would be in order.

Actually, of course, it would not be possible under present conditions to establish any level of rates which would yield an 8 per cent return for the railroads as a whole and any attempt to do so would cause such a wholesale loss of traffic as to result in lower rather than higher earnings. It is relevant to point out in this connection that the recent Report of the Presidential Advisory Committee on Transport Policy and Organization, which is strongly endorsed by the railroads, maintains that the economic limitations upon railroad earnings under present conditions are such as to make unnecessary

TABLE IV

RATE OF RETURN EARNED ON ICC RATE-MAKING VALUE, CLASS I RAILROADS, 1955

United States	4.54%
Eastern District	3.72
New England Region	1.83
Great Lakes Region	4.42
Central Eastern Region	3.51
Eastern District, Including Pocahontas Region	4.35
Pocahontas Region	8.59
Southern Region	5.59
Western District	4.38
Northwestern Region	3.21
Central Western Region	4.93
Southwestern Region	4.93

Source: ICC, Monthly Comment on Transportation Statistics, February, 1956, p. 8.

regulatory control of the level of earnings.

HENCE there may be reasonable doubt whether the 6.06 per cent over-all rate of return which the carriers estimate will be earned if the 15 per cent increase is granted will actually be earned under present conditions of pervasive competition afforded by various other forms of regulated and unregulated transportation. The latter rate of return figure assumes that the volume of rail traffic will remain at least at the level experienced during the year ending June 30, 1956. It is further assumed that concurrent rate increases by motor common carriers will minimize diversion of traffic. This argument overlooks the possibility of diversion to private and exempt carriers, and perhaps also to contract carriers. While the latter have experienced, and will experience, cost increases, it does not follow that their cost increases will exactly parallel in amount those of the railroads or that they will adopt rate-making policies exactly parallel to those of the rail-

roads. It should also be kept in mind that from a longer-run viewpoint large increases in freight rates will encourage decentralization of industry, with a corresponding increase in the relative importance of short-haul traffic, a field in which motor carriers have definite cost and service advantages as compared with railroads. Another point to note is that the 6.06 per cent rate of return figure tacitly assumes that there will be no rate reductions to prevent diversion of traffic or to attract traffic from competitors, although some of the supporting statements filed by railroad presidents in Ex Parte No. 206 admit that there will be selective reductions for the purposes just mentioned. Finally, increases in intrastate rates to match the permitted increases in interstate rates may be secured only after a considerable lag, and in some cases may not be secured at all.

THE implication of the foregoing analysis is that under present conditions it would be especially desirable both from the standpoint of the railroads and the shipping public to explore more fully the possibilities of improving the carriers' financial position by measures other than general rate increases. It will require action by the commission and Congress, as well as by the carriers, to make progress in this direction.

Footnotes

[1] Verified Statement No. 1 by G. E. Getty, in Ex Parte No. 206, Increased Freight Rates, Eastern and Western Territories, 1956, Exhibit A, p. 6.

[2] Verified Statement No. 2 by Walter Morton, Ex Parte No. 206, Increased Freight Rates, Eastern and Western Territories, 1956, p. 16.

[3] Verified Statement No. 1 by G. E. Getty, *op. cit.*, p. 15.

[4] Verified Statement No. 1 by G. E. Getty, *op. cit.*, pp. 19, 20.

[5] Verified Statement No. 1 by G. E. Getty, *op. cit.*, Exhibit A, p. 33.

[6] Verified Statement No. 1 by G. E. Getty, *op. cit.*, p. 10.

[7] Interstate Commerce Commission, 66th Annual Report, 1952 (Washington: Government Printing Office, 1953), p. 37.

[8] See 21 *Federal Register* 4435, 4438 (1956) and National Association of Railroad and Utilities Commissioners, *Proceedings, 67th Annual Convention*, 1955, pp. 439-42.

It is reported that the New York Stock Exchange, after consultation with the ICC, has asked a study group of the American Institute of Accountants to study the desirability of various changes in railway accounting regulation, including the matter of provision for future income tax liability resulting from rapid amortization. The Stock Exchange is said to fear that investors are being misled concerning the current level of earnings because of failure to include the latter provision. See *Wall Street Journal*, November 30, 1956, p. 3.

[9] Interstate Commerce Commission, Bureau of Accounts, Cost Finding, and Valuation, *Distribution of Rail Revenue Contribution by Commodity Groups, 1953*, Statement No. 4-56 (Washington, D. C.) (1956). Ton-mile percentages from ICC Statement TD-1, 1953, Carload Waybill Statistics, 1953.

[10] Interstate Commerce Commission, Monthly Comment on Transportation Statistics, March, 1956, p. 10.

[11] Verified Statement No. 1 by G. E. Getty, *op. cit.*, p. 14.

[12] Verified Statement No. 2 by Walter Morton, *op. cit.*, p. 27.

[13] "Economic Implications of the Railway Class Rate Case," 40 *American Economic Review* 113-31 (March, 1950), at p. 130.

[14] State of New York *v.* United States (1947) 331 US 284, at pp. 347-48, 69 PUR NS 278.

[15] It is reported that the eastern territory lines are seeking a reopening of Docket No. 29885, Official-Southern Divisions, and Docket No. 29799, A.C. and Y.R.R. *v.* Aberdeen & Rockfish R.R. et al. (division of joint rates on citrus fruit from Florida to official territory), both of which were decided in 1953. See *Traffic World*, November 10, 1956, pp. 51, 52.

It's New and Needed—the Telephonic Fire Alarm

Just lately the first American city replaced its old telegraphic fire-alarm boxes with a telephonic system, leased from the telephone company—with many advantages. But for years citizens had been using the private phone for fire and other emergency calls. This system puts the phone out in the street—and is a new kind of service to sell.

By JAMES H. COLLINS*

MRS. O'LEARY had no telephone, because there wasn't one in the world when her cow kicked over the kerosene lamp and burned Chicago down. It would be five years before the Emperor of Brazil, stopping at the centennial exhibit of his friend, Alexander Graham Bell, putting a new contraption to his ear, would exclaim "My God, it speaks!" Probably there was no fire-alarm box near her home. Probably the blaze was spotted by a fireman on constant watch in the fire tower.

In the near future, if Mrs. O'Leary had no phone, she might run to a new kind of fire-alarm box that is being installed in

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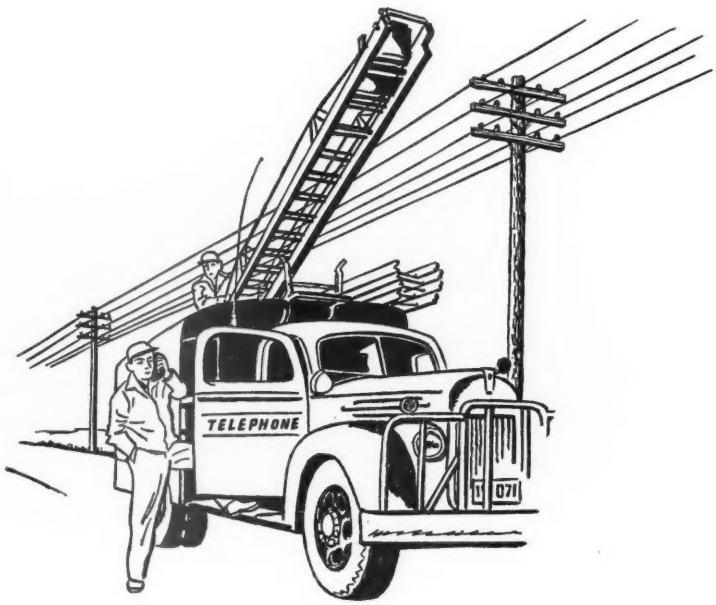

American cities, towns, and even villages, a telephone "public emergency" box, operating over the telephone system, and adapted to police, ambulance, auto wreck, storm, and other emergencies, in which citizens on the street suddenly need the assistance of city services.

This is a new service that telephone companies have to sell, for the first installation was made only eight years ago in Roanoke, Virginia. Since then it has replaced telegraphic fire-alarm systems in Indianapolis, Miami, Omaha, and New Orleans, as well as in two or three dozen smaller communities.

It is new in that city fathers all over the country are considering adopting it, and telephone companies are engaged in engineering research to develop the best equipment. But telephone reporting of fires and emergencies is not new, because more than two-thirds of fire alarms alone are now sent in over home and business phones, and in some communities as high as 95 per cent. The street box simply makes telephone service available to more people at all hours.

AMONG the advantages that telephone companies have to offer, in promoting this service with city officials, is finance. Telegraphic systems have been bought from manufacturers by the cities, maintained by them, extended, and rehabilitated as time went on, all with capital investment necessarily provided by city taxpayers. Telephone service is on the leased basis now so much used for many kinds of equipment, with maintenance by the telephone company.

A community becomes a prospective lessee when its telegraphic system needs rehabilitation and extensions. That is a common situation since war's end, with growing population and industry, rising costs, and huge demands for new money to provide streets, schools, police and fire protection, recreational facilities, and the like.

A typical and dramatic case of conversion to leased telephone service comes from Syracuse, New York, which was devastated by Hurricane "Hazel" in 1954, with 167 telegraphic fire-alarm boxes killed. Hundreds of private phone calls reported emergencies, and a separate police system of 50 boxes, leased from the telephone company, was completely intact during the emergency.

After the hurricane, estimates of cost for repairs on the old system ran from $273,000 to as much as $670,000. The maintenance of this system by city employees had cost more than $250,000 the previous ten years, and installation of new boxes to keep pace with community growth had been a heavy expense.

THE city's bureau of research estimated the yearly cost of rehabilitating the telegraphic system as follows:[1]

Maintenance by city employees	$33,515
Equipment and supplies	6,500
Yearly amortization on $273,000 capital costs over twenty-five years, no interest charges	10,921
Yearly rental police telephone call system	9,463
	$60,399

For the leased telephone system there was an initial installation charge of $7,515, nonrecurring, and these two yearly expense items:

[1] *"Public Emergency Communications Systems for Cities,"* by Orlin F. Nolting, assistant director, International City Managers' Association, published by the association, March, 1956, at 1313 East 60th street, Chicago 37, Illinois. Price, $2.

Yearly rental of complete system, with maintenance	$44,089
Yearly amortization of installation charge ($7,715)	300
	$44,389

Thus the city saves $16,000 a year, as the police phone call system is eliminated, being absorbed into the general emergency call system.

WITH a telephonic system the familiar fire-alarm box is replaced with a somewhat similar aluminum box, mounted on a pole. It is usually red, like the fire box, but has the word "Telephone" cast in the metal across the top, and on the box itself there is room for words such as Fire, Police, or Emergency, to be stenciled on as city authorities desire.

The box is unlocked, has no pull-down handle, and when opened discloses a hand phone on a hook. This when removed instantly turns in an alarm on a fire department switchboard, which continues even if the person at the box hangs up. The fire department operator speaks to the person at the box, gets details of the fire or emergency, and assures him that apparatus is on the way. Confusion at the box does not interfere with the dispatch of apparatus.

Various types of circuits and connections are available to meet the requirements of city officials, who have different views about complications in a fire-alarm system. In some installations, each street box is connected by a separate circuit to a switchboard in fire headquarters, from which, by push-button and other devices the call may be distributed to police, ambulance, and other emergency agencies. In other cases calls go into a general emergency switchboard. All circuits are under constant test, and if one box or circuit goes out, the trouble is signaled by a light; one box or circuit inoperative does not affect others.

SOME installations have teletypewriter facilities for record, and in others all conversation from street boxes is recorded on tape. A recent addition by the Bell system is recording equipment that automatically prints the box code number, time, and date of each call from a box. Such records can be of great value where calls are complicated by crimes and legal actions following damage. A good deal of telephone engineering research is now directed toward developing the equipment and types of service required through city officials' experience.

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¶ "IN *the near future, if Mrs. O'Leary had no phone, she might run to a new kind of fire-alarm box that is being installed in American cities, towns, and even villages, a telephone 'public emergency' box, operating over the telephone system, and adapted to police, ambulance, auto wreck, storm, and other emergencies, in which citizens on the street suddenly need the assistance of city services. This is a new service that telephone companies have to sell, for the first installation was made only eight years ago in Roanoke, Virginia.*"

The advantages of the telephone system, as reported by Syracuse research officials, are summarized as follows:

The person reporting a fire alarm can give particulars that enable the dispatcher to send the right apparatus, and a telephone conversation with the fire department dispatcher brings assurance that the alarm has been heard, which is not always the case when a telegraphic alarm box has been pulled. The person reporting the fire may then return to the scene, which may be his home, to protect lives and property.

Greater speed in dispatching apparatus is reported in some installations—Miami finds that at least two minutes are saved, which may be a critical period in checking a fire that is headed towards disaster.

Emergency calls of many kinds other than fire alarms are turned in over the telephone system. Besides police calls made in connection with crimes, and ambulance calls for accidents, there are calls for broken electric wires, fallen trees, burst water and gas mains, requests for inhalators and medical services. Central dispatchers quickly send the required aid, or connect the person calling with the proper facilities.

In Miami, while only 393 fire alarms were sent over the telephone system the first year, there were 150,000 calls for police, ambulances, automobile wrecking crews, and like emergencies. Also, city employees working on field assignments used the service to report and ask for instructions. The general public quickly learned to use the service to secure the city's public aid facilities.

THE first leased telephone emergency alarm system in California was installed recently in Whittier, the southern part of the state, by the independent General Telephone Company of California, with the attendance of 135 southern California fire chiefs, city managers, and city officials, and these advantages are reported by Whittier's fire chief, A. B. Alford:

1. A person reporting a fire can give the exact location and description of the blaze, enabling the dispatch of the proper equipment in the shortest time.

2. The person reporting a fire knows that he has been heard, that help is on the way, and can return to the scene to render assistance.

3. The telephone system is available for all other emergency calls.

4. The system has built-in testing features that reveal trouble on one or more circuits, the switchboard being equipped with two lamps for each circuit; trouble in one or more circuits does not affect the general system.

5. New telephone units can be added with minimum delay, especially for short-time and seasonal activities, such as sports, fairs, recreation centers.

6. The city is relieved of capital expenditures for extension of the system, and of maintenance, all of which is taken care of by the telephone company, which specializes in communications services. Maintenance is on a priority basis, twenty-four hours a day.

7. Chief Alford estimates that telephone service will be installed at about one-third the cost of a telegraphic system, and the monthly service charge will be considerably less than maintenance of a city-owned telegraphic system.

8. Whittier is now rated fifth class in fire insurance, and expects to qualify for fourth, possibly third class, with an esti-

WHATEVER became of the old-fashioned "Whozit"? Any discussion of vandal-proof speaking apparatus in public places brings to mind nostalgic recollection of the old acoustic whistling and speaking tubes which used to thrive in many walk-up apartments of a few decades ago. Massed EN BANC *in the downstairs hall or lobby, they enabled the casual caller to announce his presence to any resident. He would then listen for the inevitable reply: "Who is it?" This, of course, was shortened (in Brooklyn and other places) to "Whozit," which came to be the nickname of this interesting device. They were usually mounted high—to defeat prankish small fry. But ingenious youngsters could usually find a way to "blow the whole line" to while away a dull afternoon. A recent inquiry failed to disclose a single large-scale manufacturer of "Whozits" still remaining in business.* SIC TRANSIT GLORIA.

mated 10 per cent reduction in fire insurance rates.

In 1948, fire underwriters studied Whittier's fire setup and recommended a telegraphic system. The lowest bid for such a system was $45,000, not including maintenance, which would require a full-time electrician. In 1950, Chief Alford visited several cities with telegraphic systems, the only type then approved, learned that only a small percentage of fire alarms originated at pull boxes, became interested in several cities using a telephonic system, and closely followed developments in Miami, which became operative in 1953. He decided that Whittier's needs could best be met by the new, modern telephonic system, and such a system was specially engineered for the city by the telephone company.

THE market for telephonic emergency service exists in every type of community, from large cities to small villages, and the types of installation are diversified to an extent that invites co-

operation by telephone engineers and sales departments.

For example, the world's largest city, London, England, went onto a telephonic fire-alarm basis in 1948. London had a 68-year-old telegraphic box-alarm system. England has a nationalized telephone system. It was found that an increasing number of fire calls came over the ordinary telephone, and that three out of four telegraphic box fire calls that year were false alarms. Whereupon public phones were made available for emergency calls. Fire brigade drivers were then able to go direct to the fire, within an average time of twenty-six seconds. The same idea has been adopted in this country for pay stations by the dialing of "O."

The second community in this country to install a telephonic system was the town of Solvay, New York, 7,868 population. Its old telegraphic system needed rehabilitation at a cost of $150,000. Forty-two telephone boxes were installed at a cost of $816, with a monthly rental of $264.

Another small community, Two Rivers, Wisconsin (10,243), has a telephonic system installed by the independent General Telephone Company in its 10-block main business district; the monthly rental, including maintenance service, is $4.80 per box.

Massena, New York (13,137), has a 24-box telephonic system at a monthly rental of $316.40. Phillipsburg, New Jersey (19,000), has 66 phone boxes, installation cost $600, annual rental with maintenance $8,400. Sault Ste. Marie, Michigan (17,912), replaced 28 telegraphic boxes with telephonic boxes at a cost of $5 per box, plus $2.50 additional for each of five boxes with special light calls, and $122.75 for a PBX and public address system at fire headquarters. The monthly rental is $13 per box, plus $1.50 for the special light call boxes, $22.75 for the public address installation, and $35 for the PBX. Lyndhurst, New Jersey (19,980), has 64 outdoor boxes and one phone in the fire station, at a total monthly rental of $537. The New Jersey Bell Telephone Company issued a booklet describing the system, and giving instructions for its operation. Princeton, New Jersey (12,230), replaced 27 telegraphic boxes with 33 telephonic stations, at $314 monthly rental.

Two cities have installed their own telephone systems, instead of leasing from telephone companies.

Minneapolis had more than 600 telegraphic boxes, purchased from a manufacturer, and of course owned by the city. In 1955 the fire department designed a new door for 23 boxes, with outside lettering "Fire Alarm and Emergency Telephone," and instructions inside: "Pull the hook, lift telephone, and talk to the operator." Even the lifting of the hook registered a signal at fire headquarters. These boxes were so successful that the city plans converting 50 a year, until all are on its own telephone system. Installation by fire department personnel cost about $25 per box.

In 1954 Medford, Oregon (19,000), installed 33 nondial phones in iron outside boxes, with a telephone system powered by the local utility company. Boxes and phones were purchased as Army camp surplus from a telephone company. The cost of a telegraphic system would have been about $40,000; this city-owned sys-

tem cost about $10,000. During 1955, 80 per cent of fire calls came in over private phones, 19 per cent over police radio, and only 1 per cent over the telephonic emergency system.

In some cases where the city has installed telephonic systems, business concerns have paid for boxes in factories and other premises not covered by the city system, meeting installation and rental charges. This has a definite value in safety programs, and could be a separate promotion angle for telephone companies.

NEW ORLEANS had a 55-year-old telegraphic system of 385 boxes which, last year, was so deficient for fire protection that the National Board of Fire Underwriters assessed 420 points against it, out of a total of 550. In 1953 the city had employed a firm of consulting engineers to survey the situation, and its report recommended that the telegraphic system be increased to 4,000 boxes. Also, a proposal for a telephonic system was said to be "not to the best interests of the city." In 1955 the acting mayor recommended to the city council a leased telephonic system of 750 boxes, installed and maintained by the Southern Bell Telephone & Telegraph Company; this recommendation was based on the report of another firm of consulting electrical engineers. Before the city signed the contract the plans and box locations were submitted to the fire underwriters, and to the state rating bureau, in the interest of securing lower fire insurance rates.

Eventually the system will be increased to 1,500 boxes, but for the present there are 200 in the high value district, 330 in neighborhood and suburban shopping areas, and near schools, hospitals, theaters, churches, warehouses, and the like, and about 250 boxes along principal thoroughfares. It is estimated that the great majority of fire alarms will continue to come in over private telephones.

For this system the city pays a yearly rent of $150,000, from which is deducted about $35,000 formerly spent in telegraphic box maintenance.

THIS is a typical situation that will be found in many cases where communities finally convert to a telephonic system. There is competition from telegraphic system manufacturers, and sometimes conservatism among fire department and city officials. They have grave responsibilities, involving life and property, and their thinking is governed by those responsibilities.

For example, when steam fire engines began to be replaced by gasoline power engines, fire chiefs in northern states were

¶ "ARE *there 'bugs' or disadvantages in the new telephonic alarm which still need straightening out or at least objective consideration? Probably there are. One obvious difficulty might be the vulnerability of such equipment to vandalism. The telegraphic pull box is a pretty sturdy piece of armored equipment not very tempting to the juvenile delinquent or other irresponsible persons who might want to wreck something or take parts home for souvenirs or whatnot.*"

dubious about apparatus freezing up during the progress of a fire. They had always had steam to thaw out equipment, and had to be shown, by experience, that the new equipment did not have this hazard.

So, from the standpoint of telephone men, advocating a new system, time must be allowed to arrive at decisions. It might be several years, though there is now a definite interest in the telephonic emergency reporting system, and an increasing number of American communities successfully using it, and advocating it. City officials have gone to Miami from many U. S. and Canadian cities, and from Latin America, and the city has received more than 10,000 inquiries about its system.

OTHER telephonic techniques are being studied in connection with these new voice transmission systems. One promising development is the use of beamed microwave for outlying areas. In Phoenix, the Radio Corporation of America, in 1953, installed a 2½-mile microwave system, and during seven months 754 alarms were received over it, proving the idea perfectly usable. The city then suspended further action, pending the settlement of its differences with a telegraphic box system concern.

The initial cost of microwave is high, but it replaces many cables, and it is expected that costs will be brought down with further research. There are other complications; microwave beams would have to be protected by new building ordinances covering structures that would cut them off, and the Federal Communications Commission is studying the spectrum congestion angles. Phoenix officials estimate that a microwave system for the city would cost from $250,000 to $300,000, about half that of a telegraphic system covering the same area.

San Jose, California, has experimented with a "ground wave" system, in which a very small, inexpensive, low-battery-power transmitter is buried in the ground, with a compact directional antenna. This is connected with street boxes. San Jose officials believe that such a system is operative, involves moderate installation costs, and enables the city to own the system, but there are complications of available channels, which are being studied by FCC. Short-wave radio is another possibility, and combinations of telephonic and telegraphic systems.

THERE is a desire among some city officials to own their system, due to the feeling that it passes out of their control when it operates through the telephone system. What will happen to public safety if there is a breakdown of the telephone system by storms or disaster, and especially where will the city's system be in case of strikes? As maintenance is transferred to telephone crews, the city has no trouble shooters, nor any jurisdiction over a supposedly crippled or struck phone system.

Experience in storms thus far has shown that a telegraphic system is more likely to be crippled than telephone service, because the latter is mostly underground. Telephone crews are conspicuously able in restoring service, and in disaster may be recruited from wide areas. City officials who have installed telephonic systems often breathe a sigh of relief because storms no longer worry them.

As for strikes, telephone companies are able to operate equipment necessary to the

public safety, and during the Southern Bell strike, Miami's telephonic system was not affected in any way.

ONE of the hot competitive issues raised when city officials are considering the respective merits of the two systems, is false alarms.

Malicious false fire alarms are a serious and growing problem in many communities.

Fiscal year figures for Washington, D. C., show that around one in ten fire alarms received over its telegraphic system are maliciously false:

Fiscal Year	*Total Calls*	*Total False*	*Percentage False*
1954	10,451	978	9.3
1955	10,390	1,037	9.9
1956	11,029	1,195	10.7

During this period the total number of alarm boxes and the physical boundaries of the city have remained around the same. The telegraphic fire-alarm system in the nation's capital is the subject of a controversy, some officials maintaining that it is adequate and in good repair, while outside investigators pronounce it inadequate and obsolete. Fire Chief Millard Sutton values the city-owned telegraphic alarm system at $1.5 million, exclusive of wires and cables. It has been calculated that this capital, at 6 per cent interest, including the value of wires and cables, would earn more than enough to pay for the installation and rentals on a 1,700-box telephonic system, and the city would be saved all maintenance, operating, and replacement expense. Also, extra tax collections from the telephone company would bring added revenue.

Like other American cities, Washington receives the greater number of its fire alarms over private telephones, and experience in cities that have adopted telephone systems indicates that Washington's dubious record might be changed.

IN Miami, before the telephone system went into operation, a study of 9,099 fire alarms showed 88.5 per cent coming in over private phones, and only 4.5 per cent over telegraphic alarm boxes. Out of 413 box alarms, 267 were false. In a comparable period under the new system, only four false alarms were received.

Rockford, Illinois, had 100 false alarms from telegraphic boxes out of 122, decreased on the installation of a telephonic system.

Syracuse had six out of ten false alarms from telegraphic boxes, almost eliminated by a telephonic system. Fire department records showed that 44 per cent of the telegraphic boxes had not been used once in five years, yet that a great number of fires had occurred where these boxes were, alarms being received by private phone.

Princeton had more than half false alarms over telegraphic boxes before installing its telephonic system, and not one false alarm during four months after it went into operation.

Why people turn in false alarms seems to be a problem of the same sort as juvenile delinquency, or the wrecking of schoolrooms. The motives are mixed. Fire-alarm boxes may be pulled by youngsters, by bored oldsters who want excitement, by criminals who want to distract attention, by persons with bats in the belfry. They are partly a police problem. In Richmond, Virginia, recently the police brought considerable ridicule upon themselves by putting a dye on the handle of a telegraphic box from which false alarms

were persistently coming in, and then Sherlocking for persons with the dye on their hands. No soap, but some caustic editorial observations.

There is a tragic aspect to false alarms, for they are largely turned in from low-income neighborhoods, crowded and full of firetraps, where prompt action by the fire department is most necessary in saving human lives.

ARE there "bugs" or disadvantages in the new telephonic alarm which still need straightening out or at least objective consideration? Probably there are. One obvious difficulty might be the vulnerability of such equipment to vandalism. The telegraphic pull box is a pretty sturdy piece of armored equipment not very tempting to the juvenile delinquent or other irresponsible persons who might want to wreck something or take parts home for souvenirs or whatnot. A conventional type telephone with a separate transmitter attached by cord to a hook or cradle base is pretty susceptible to being ripped out, torn off, or battered to pieces against the box.

A sad fact in modern society, and one which any experienced city police officer will readily confirm, is that there are queer kids and grownups too who roam about the streets, especially after dark, breaking windows, wrecking schools, and other private property. Such characters are mostly confined to slum or extra tough neighborhoods. Nevertheless it may be that emergency telephone box equipment can be made a little more foolproof, drunk proof, or outright nut proof, especially in areas of greatest vandal hazard. It is an aspect certainly worthy of consideration. Otherwise the telephone company might get itself into the uncomfortable position of Victor Borge's fabulous father, who (according to his facetious offspring) invented a fine burglar alarm, but it was stolen.

However, as in the case of the false fire-alarm menace, there may well be some psychological advantage for telephone equipment which can put the screwball element in greater fear of detection, than the telegraphic pull boxes. This might even apply to the vandalism risk. It will be interesting to note, in years to come, how it all works out.

THIS telephonic emergency system is new, and yet not new. For the telephone has established itself as the main agency for turning in fire alarms, and has been used for many other emergencies where citizens need help. It is flexible. It makes available for this service the telephone equipment of a community, which in itself is a great municipal department.

Briefly, it is a telephone job!

". . . measuring profits in terms of dollars alone is a good deal like measuring dress goods with a rubber yardstick; for this method makes no allowance for the shrinkage in the value of the dollar, for the increased volume and quality of production, or for the heavy investment that has been made in new facilities."

—ROGER M. BLOUGH,
Chairman of the board, United States Steel Corporation.

Accountants as Regulatory Commissioners

This discussion of qualifications for a public service commissioner underlines the varied type of demands made on the state commissions. They are expected at various times to cover fields involving services of lawyers, accountants, writers, and occasionally engineers.

By LINCOLN SMITH*

THE selection of some accountants as regulatory commissioners is a current phenomenon in the annals of utility regulation, administrative law, and the entire regulatory process. It is not yet strong enough to be categorized as a trend; nevertheless, recent canvasses have revealed that several accountants have been elevated to commissionerships at both the national and state levels. In increasing numbers they have been hired for regulatory staffs. Some evidence indicates that more accountants will have to be recruited for top posts. This new direction warrants analysis and evaluation in the light of theoretical and practical considerations of public control for the commonweal.

The present article will attempt to answer such questions as: How many accountants have become commissioners? Why has this happened? From present appearances, may the accession of accountant-commissioners congeal into a trend? What fundamental contributions can an accountant make to the regulatory process? Does he have any inherent limitations? Can the functions of the accountant best be achieved in command posts of regulation; or should they be relegated to secondary status on the staff?

AT the outset a note of caution is proper. While the answers to a few of the above questions are factual and can be given objectively, many call for value judgments which therefore are vulner-

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able to subjectivity. Hence, some hypotheses and tentative conclusions are open to the professional dogmatism, predilections, and preconceived prejudices of the individual who offers them. An attempt will be made, however, to present both sides of the more controversial issues which may encourage a synthesis according to the reader's own dialectics. No attempt is made to impose any view; rather the desire is to provide insight into an incisive problem in public law, adminstration, and economics. This is a study of one facet of professional expertise in relation to the manning of state and national regulatory agencies.

A FURTHER warning is in order. This discussion is concerned with human beings in one profession, and with unknown individuals who already are in, or who subsequently may enter this growing occupation. It also deals with incumbent commissioners, but more especially with the anonymous and hypothetical individuals who may be in line for commissionerships years hence. There are well-trained and poorly trained accountants. Some possess an extremely narrow gauge of competence—a horizon limited to routine and purely ministerial tasks. A few are self-glorified clerks or bookkeepers, anxious to "cash in" on the incremental prestige of the accountant. Others come from the best schools in the country. Their training includes a broad perspective in such cognate fields as economics, law, politics, and the humanities. Many "good" and some "mediocre" accountants possess certain innate personal characteristics which will enable them to rise to the occasion and meet creditably an interesting public challenge of responsibility. In short, much depends upon the temperament and mental alacrity of the man himself.

A CAREFUL and competent study of state utility commissions in 1929 revealed that no accountants then held commissionerships.[1] Another pioneer exploration at the national level in 1936 showed that no commissioners were, or had been since the inception of federal regulation, employed as accountants at the time of their appointment; or that their primary occupations were those of accountants.[2] It may have been, however, that some of these federal and state commissioners were acquainted with the fundamentals of accounting. Many commissioners at both planes had backgrounds in law, business, public service, banking, journalism, and other public callings. Some were, or had been, professional economists, and students of finance and economics. Certainly quite a few commissioners had been exposed to the disciplines of accounting in their education and experience, even though they belonged preponderately in other vocations.

A survey of state regulatory agencies in 1954 indicated that an accountant was commissioner in New York and Rhode Island. In Connecticut a commissioner was a statistician.[3] Shortly thereafter, an accountant was appointed a member of the Maine Public Utilities Commission, replacing the then only lawyer-commissioner of that tribunal. The New York accountant was also an economist.[4] This study found throughout the states that commissioners under the heading of "general business" was second in popularity only to lawyers. Hence, it may well be that many commissioners are avocationally accountants.

An examination of selected federal commissions, also in 1954, showed two accountants as members of the Federal Communications Commission, and one on the Atomic Energy Commission.[5] On the former agency one was also an attorney, and the other had experience in several diverse callings. The member of the Atomic Energy Commission also had experience in business and in university administration. Other commissioners qualified in such areas as insurance executive, economist, general counsel for business concerns, business specialist, banking, consultant in securities and investments, and in others which embrace phases of accounting. One commissioner on the Federal Trade Commission, an attorney, had taught economics, finance, and accounting at the college and university levels.

As these data show, it is exceedingly difficult to segregate or compartmentalize accounting from other educational subjects. The reasons therefor are almost obvious. Accounting cuts through many fields. The subject has a high place in business administration; it belongs also in liberal arts training. Many lawyers and engineers must have a working knowledge of it, so nontechnical accounting frequently is offered in those professional schools. The accountant, on the other hand, often dabbles in business law,[6] economics, banking and finance, management, and industrial relations. Thus, many accountants are well-rounded through intercommunication and interaction with other disciplines. This study proceeds, however, with an analysis and appraisal of accounting as a single factor in the component functions of regulatory administration.

THE rationale for selecting an accountant for a commissioner is predicated on the maxim that accounting is an integral part of public regulation. Knowledge of this technique enables the commissioner to perform and/or supervise one of the basic functions in the regulatory process. Phases of inspection work and valuation of property for the purpose of rate making require the services of carefully selected accountants. A man who is well-grounded in one segment of the task, so it is alleged, will be more adept at grasping and solving problems in that and in other areas than a professional politician or general administrator who has no special training for the job.

This theoretical premise has been recognized in practice. A leading authority re-

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ports that accountants are often chosen as commissioners because of their technical qualifications. He cited the Arkansas law which formerly required that one accountant be a member of the tribunal there.[7] Nevada law, at one time, provided that one of its commissioners be "a businessman having a general knowledge of fares and freights, tolls and charges."[8] This incumbent certainly needed some familiarity with accounting procedure. One national and one state example are cited here to show the importance of accounting as one of the conglomerate ingredients of public regulation. The Federal Power Commission, in 1952, employed 116 accountants on its staff. The relative significance of this work can be shown. The FPC employed 220 engineers, and thirty-eight attorneys. The Pennsylvania commission was even more partial to accountants, employing fifty-five for its staff, in comparison with thirty-seven engineers and twenty-one attorneys.[9]

ADDITIONAL comments on staff accountants point up their rôle in the regulatory process. Control of railroads was the earliest task of commissions. Although lawyers then were popular choices for top posts,[10] the assistance of engineers and accountants was essential. Members of these two professions soon occupied strategic staff positions on the leading agencies. At first the work of engineers was basic in the valuation of used and useful property of the companies regulated. After a short time lag, accountants were added to the staffs in a supplementary status. The Smyth *v.* Ames decision,[11] which required that due consideration be given to the **"fair value"** doctrine—largely an assignment for engineers and accountants to carry out—gave an impetus to both professions on commission staffs. In numerous jurisdictions accounting was elevated to a complementary place. In some of these agencies interprofessional rivalry between members of these two professions was acute, as accountants made some competitive inroads into the previous prerogatives of staff engineers.[12]

THE need for smooth teamwork between the members of these two vocations, indeed the ability of each to integrate and co-ordinate its tasks with those of the other, and for mutual comprehension of the two coequal functions is essential. The New York commission now has a model form of organization to achieve these results. The accounting bureau and the general engineering bureau come within the division of utilities. The former contributes in this way:

> The utilities accounting bureau has assigned to it all of the accounting work in the utilities division. It makes examinations of the books and records of the utilities in rates and capitalization cases, mergers, consolidation, and in property transfers in co-operation with other bureaus in the division. The bureau inspects books of the utilities to assure compliance with commission orders, provides accounting advice to utilities, and reviews the annual reports submitted to the commission by the utilities. This unit is also organized as a "pool" and accountants are temporarily assigned to other bureaus in the utilities division.[13]

There is, in addition, an accounting and rates bureau in the division of transportation which functions as follows:

The Ideal Commissioner

". . . a commissioner needs incremental qualities over and above those of the ordinary executive. A commissioner is more an administrator than an executive. As such he frequently has a wider range of discretionary authority and a correspondingly greater degree of responsibility to the public. He works in a more intense political environment. Besides his executive tasks, he must serve in quasi-legislative and quasi-judicial capacities. Thus, much of his work is prescribed by legislative directives, and some of it is proscribed by the judiciary. Within these limits, however, he and his fellow commissioners are free to use their best judgment; they are charged with contributing the political sense of direction to regulatory policies."

The accounting and rates bureau performs accounting and valuation studies to transportation utilities, examines all transportation tariffs, and develops rate cases. The personnel of this bureau may be assigned to the other bureaus to perform various technical assignments.[14]

RETURNING to the ascendancy of accountants to top posts on commissions, one all-important question emerges: What philosophy of regulation may the typical accountant-commissioner be expected to embrace? A commissioner with a specialization in accounting is liable, *prima facie*, to favor the net investment as opposed to the cost-of-reproduction theory for rate regulation. A former Connecticut commissioner has written authoritatively on this point: "As is well known, the accounting profession has indicated the acceptance of historical cost, rather than cost of reproduction, as a basis for computing a depreciation charge."[15]

The net investment basis requires and puts extreme faith in making a careful cost rendition—and that is a cost accountant's job. No physics and little or no engineering are necessary for this task. Depreciation, too, is largely a matter of meticulous bookkeeping. So the accountants' profession plays a heavy rôle if historical cost is used. It is perhaps natural for members of a particular vocation intuitively to magnify the significance of their own contribution to a net result. The

original cost doctrine gives accountants this opportunity. But under "fair value," the accounting profession can make a relatively small contribution. As Professor Fisher has observed in regard to replacement cost: "No accountant, no economist, and no financial soothsayer possesses a crystal ball which will enable him to make . . . [a prognostication of prices for a decade or perhaps longer] that is anything more than a sophisticated guess, perhaps more hazardous than a wager on the Irish sweepstakes."[16] In short, accounting is only an underfunctionary factor of "fair value"; but it is a basic ingredient in the application of the historical cost doctrine.

THE rôles of both accountants and engineers often are overstressed in the valuation of used and useful property of utility companies. To some degree this confusion exists under the two rival ideologies of determining the rate base. Its cause is attributable to fuzzy thinking about the composite processes of valuation. Numerous commissions, and certainly both federal and state courts, at times, have been perplexed on this point—particularly on what constitutes expert witnesses on valuation. Actually, three stages occur in the process of determining the rate base. First is the inventory, which usually is delegated to accountants. Under their supervision, clerks list the properties by classes. Second comes the appraisal stage. The task here is to apply unit prices to property items. Appraisal frequently is more in the realm of engineering; although accountants have varied functions at this stage, too. In certain kinds of appraisal, particularly that of historical cost, the accountants' work is paramount. The first phase of the process involves clerical work; the second is largely ministerial. Although a small element of discretion enters the appraisal, much of this, such as selecting the base year and specific formulas for price levels, is predetermined either by statute or by commission directives. The application of commission policy in the appraisal stage is mostly ministerial work. Staff assistants usually are responsible for these two phases.

The third step in the proceeding—valuation—consists of economic value judgments. This is essentially a discretionary task. The job is to evaluate the various lines of evidence, which should be accepted, which discarded, and the relative weight accorded to each under a given set of circumstances. After a reproduction cost new appraisal, an original cost appraisal, market prices appraisal, and income appraisal, the final result constitutes an economic evaluation. When the accountant and engineer participate in the decisive stage, their contributions are beyond those of the engineer and accountant. They act then more like an economist.

THE foregoing analysis presages the author's postulate that accountants, *per se,* perform their functions in the regulatory process at the staff level of commission activity. Their services are essential for a collation, correlation, and even appraisal of measurable features in regulatory administration. But solely as accountants they lack the qualifications to cope with the nonmeasurable situations; abilities over and above those of accountants or of any other specific vocation are needed to synchronize and harmonize all the conditioning factors into an integrated whole. On occasion commission-

ers must decide on the basis of political expediency; then again legal consequences may become the advisable norm. In short, individual discretion within the limits allowed by law, rather than proficiency in any particular profession, is a basic prerequisite for positions at the administrative policy-making level. Regulation is more than a slot machine to be worked automatically by accountants, engineers, lawyers, and men of business.

THE training of the ordinary accountant militates against his success as a commissioner. He is taught to handle figures, and to work at great speed. Although he must have the answers, he seldom has time to figure them out for himself. Hence he may be prone to rely considerably on what he is told. His approach often is insular; his own ideas may be frozen in the process. Social causation and teleology are not his strong fortes. He is reluctant to dabble in empiricism, because his quest is for certainty. These allegations are strengthened materially by excerpts from two authoritative sources. Professor Herbert B. Dorau of New York University has written as follows:

> . . . the process of regulation has become substantially *conventionalized,* reflecting in large part the economically meaningless rigidities of the also highly conventionalized bookkeeping procedures. In fact, broadly viewed, the rate-making process has become a prisoner of the limited art of bookkeeping and suffers from all the rigidities, limitations, and economic errors of that limited art.[17]

ON this same point, this quotation from Mr. Justice Jackson's dissent in the Hope decision is pertinent:

> To make a fetish of mere accounting is to shield from examination the deeper causes, forces, movements, and conditions which should govern rates. Even as a recording of current transactions, bookkeeping is hardly an exact science. As a representation of the condition and trend of a business, it uses symbols of certainty to express values that actually are in constant flux. . . . However, our quest for certitude is so ardent that we pay an irrational reverence to a technique which uses symbols of certainty, even though experience again and again warns us that they are delusive. Few writers have ventured to challenge this American idolatry, but see Hamilton, Cost as a Standard for Price, 4 Law

¶ "REGARDLESS *of the theoretical arguments for and against accountants as commissioners, the pragmatic reality is that an increasing number of accountants are becoming commissioners. In the last decade the functions of accountants in national public regulation have grown; the ascendancy of members of this calling to positions of control may be a natural concomitant of the recent trend in regulation. Since the advent of the celebrated Hope decision, which popularized the 'net investment' theory and discarded 'fair value,' accountancy holds a strategic grip on this important aspect of regulation.*"

and Contemporary Problems 321, 323-25. He observes that "As the apostle would put it, accountancy is all things to all men. . . . Its purpose determines the character of a system of accounts." He analyzes the hypothetical character of accounting and says "It was no eternal mold for pecuniary verities handed down from on high. It was—like logic or algebra, or the device of analogy in the law—an ingenious contrivance of the human mind to serve a limited and practical purpose." . . . [18]

THE above indictment admittedly is oversimplified and exaggerated in order to illustrate the point at issue, and to support the contention that accounting is basically a staff challenge in regulation. Many exceptions are made. This position is not intended to reflect one iota against the venerable accounting profession; nor against the character, intelligence, and aptitude of the members of that honorable and cherished vocation. It is respectfully submitted, however, that in the majority of cases the accountant's ability to excel in discretionary provinces is enhanced more by his personal than by his professional attributes. The fact that many accountant-commissioners have been engaged in additional pursuits seems to underscore this thesis.

Another objection to accountant-commissioners centers about the flexible nature of accounting in relation to commissioner-staff prerogatives. Despite the supposed precision and accuracy of accounting—even to several decimal places—this technique depends upon certain predilections, controlled guesses, arbitrary assumptions, and immeasurable variables. At times, by cautious selection of figures, careful timing, and shrewd choice of an adaptable formula, accounting results often can be made to conform to preconceived conclusions. Sometimes the accountant does not participate in the selection of these vital determinants; the elements of discretion are utilized in the top brackets. Here is a relevant opinion from the business world on this point:

> [By the allocations of cost accounting] management can rationalize almost any course of action or justify any extravagances. . . . too often accountants create their own formulas of costs from generally accepted principles. . . . An estimate of costs is a valuable but slippery tool.[19]

ALTHOUGH conjectural, an accountant-commissioner could use his top position to manipulate the work of the staff accountants into his own channels of thought. He might substitute his views on accounting for those of the staff; and, as the superior of staff assistants, give professional directives below which would negate the underlying presumption of regulatory administration that expertise comes from the staff and political direction from the commissioners. While preoccupied introspectively with the accounting functions, these commissioners might neglect other, and perhaps more important, phases of their duties as top regulators. This objection, of course, applies to any other professional expert as well as to accountants who occupy positions at the top echelon. One result, then, would be to segmentalize the activities on the commissioner level as well as among the staff members. Although this is done on the Interstate Commerce Commission (the ICC compartmentalizes much of its

Why an Accountant-commissioner?

"THE rationale for selecting an accountant for a commissioner is predicated on the maxim that accounting is an integral part of public regulation. Knowledge of this technique enables the commissioner to perform and/or supervise one of the basic functions in the regulatory process. Phases of inspection work and valuation of property for the purpose of rate making require the services of carefully selected accountants. A man who is well-grounded in one segment of the task, so it is alleged, will be more adept at grasping and solving problems in that and in other areas than a professional politician or general administrator who has no special training for the job."

work), the arrangement fails to recognize from orthodox jurisprudence the doctrine that a composite consensus should control administrative policy decisions.

REGARDLESS of the theoretical arguments for and against accountants as commissioners, the pragmatic reality is that an increasing number of accountants are becoming commissioners. In the last decade the functions of accountants in national public regulation have grown; the ascendancy of members of this calling to positions of control may be a natural concomitant of the recent trend in regulation. Since the advent of the celebrated Hope decision,[20] which popularized the "net investment" theory and discarded "fair value," accountancy holds a strategic grip on this important aspect of regulation. One authority corroborated this fact recently: "Regulation has become a captive of accounting conventions at the very time when it is becoming most widely understood that their variance from economic reality is wide and unpredictable."[21] The professor deplored the situation, and was concerned greatly about

"the consequences of imposing a bookkeeping strait jacket on ever-changing dynamic economic relationships."[22] On the other hand, considerable agitation in several states purports to change the organic acts and require the commissions in those states to adhere to the historical cost policy. If this alternative succeeds, more staff accountants will be needed. A new policy might give an impetus to sentiment in favor of accountants in the determinative positions as well.

THE time factor in the selection of current accountant-commissioners deserves analysis. These federal commissioners received their appointments in 1953. The New York commissioner was appointed in 1949. Only one of the key commissioners under consideration in this discussion was appointed before 1944; the Connecticut commissioner was named in 1943, and has been chairman since 1947. Thus, the great majority of these choices for commissioners were made after the Hope decision. Whether this court opinion figured into the *ratio decidendi* of the appointing officials, or whether it was entirely coincidental, is doubtful. It is a fact, however, that wherever the net investment policy prevails, a great burden is placed on the contributions of accountants. The public challenge is to attract for top and staff positions the best available talent from this calling—men of character and broad understanding, too.

The countervailing tendencies—against accountants for commissioners—are not yet very potent. Some experts continue to argue quite effectively against the "net investment" principle. A resurgence of the opposing theory would relegate accountants to secondary status. In a single phase of the regulation of natural gas, the Federal Power Commission is probing in this direction. The commission deserted historical cost of reserves as a rate base in favor of "fair field value."[23] Production of gas apparently is considered now as a going commodity for sale instead of regular property of the utility company. Another step away from accountants as commissioners is that Arkansas and Nevada have repealed those parts of their regulatory statutes which required an accountant and the equivalent of one on their tribunals. This is in accord with the trend to give appointing authorities a reasonably free hand in the selection of commissioners.

Finally, there is a growing conviction that "generalists" or men with administrative ability and with training in regulatory administration make better commissioners than representatives of a single vocation. This thesis radiates largely from academic circles; nevertheless, its influence is felt on the national level and in some of the states.

THIS sketch concludes with a plea for the "generalist" as opposed to the accountant or any other specialist as the ideal commissioner. The commissioner, like the city manager, is a jack of many utilitarian trades. A good one is a profound person who can grasp basic issues and reconcile major conflicts. He develops co-operation and teamwork among his colleagues on the staff, to whom he delegates special tasks and on whom he relies for expert advice.

Professor Marshall E. Dimock of New York University has written that the executive must be able to

plan, integrate, and combine all the

components of his enterprise into a unified and smoothly working whole. The successful executive, therefore, is he who commands the best balance of physique, mentality, personality, technical equipment, philosophical insight, knowledge of human behavior, social adaptability, judgment, ability to understand and to get along with people, and a sense of social purpose and direction.[24]

THE present writer argues that a commissioner needs incremental qualities over and above those of the ordinary executive. A commissioner is more an administrator than an executive. As such he frequently has a wider range of discretionary authority and a correspondingly greater degree of responsibility to the public. He works in a more intense political environment.[25] Besides his executive tasks, he must serve in quasi-legislative and quasi-judicial capacities. Thus, much of his work is prescribed by legislative directives, and some of it is proscribed by the judiciary. Within these limits, however, he and his fellow commissioners are free to use their best judgment; they are charged with contributing the political sense of direction to regulatory policies. Many specialists lack the broad-gauge outlook and vision to anticipate the consequences of contemplated courses of action.

A WELL-KNOWN practitioner in public administration points up the limitations of the specialist outside his own area:

> The tendency of the specialist to apply the criteria of his special subject to other subjects than his specialty often produces dogmatism, prejudice, and narrow-mindedness, particularly toward other large fields.[26]

And Professor Dimock has warned that balance is lost through overspecialization, when the individual becomes lopsided or merely a technician.[27] The present writer believes that the inherent weakness of the expert in general, or of the accountant in particular, at the administrative policy-making level is his lack of perspective outside his own sphere of competence. His cohesive technique as an accountant is too narrow to act as a springboard for discretionary responsibilities at the apex. While preoccupied with the trees, he fails to see the forest—he is inept at grasping the broadest implications of management. The syncretic nature of public regulation demands multidimensional directors of the agency hierarchy.

In short, the taxonomic approach of the specialist can be bridged only by the aptitude and intelligence of individual commissioners. They probably are aware of the limitations of their professional skill.

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Hence, they can overcome their professional shortcomings by virtue of individual abilities. The writer believes this personal equation, which includes appropriate cultural backgrounds, accounts for the success of nearly all accountants and other specialists who are serving as commissioners.

Footnotes

[1] "The Trend from Lawyers to Laymen as Commissioners," by Francis X. Welch, PUBLIC UTILITIES FORTNIGHTLY, December 26, 1929, pp. 801-807.

[2] *"Federal Commissioners,"* by E. Pendelton Herring (Cambridge, 1936), p. 114.

[3] "Trend from Lawyers to Laymen on State Commissions," by Lincoln Smith, PUBLIC UTILITIES FORTNIGHTLY, November 11, 1954, pp. 630-639.

[4] Rhode Island has an unusual setup, wherein public utilities is a division within the Department of Business Regulation. It is perhaps typical of several state commissions, though, that business pursuits enhance the prerequisites of regulators. The director in Rhode Island has a business management and public relations background, while the public utilities administrator has one in finance and investment. The hearing board for public utilities, which is independent of the department, consists of one accountant and two businessmen.

[5] "Professional Qualifications of Federal Regulatory Commissioners," by Lincoln Smith, PUBLIC UTILITIES FORTNIGHTLY, Part I, November 25, 1954, pp. 683-694; Part II, December 9, 1954, pp. 752-761.

[6] Business law, however, is remote from public utility law and administrative law—areas in which commissioners are working constantly. For a comparison between accounting principles and legal concepts, see Law and Accounting, by Winsor C. Moore (Creighton University, Omaha, 1952).

[7] *"Economics and Public Utilities,"* by Eli W. Clemens (New York, 1950), p. 405.

[8] Nevada, Revised Laws, 1912, § 4519.

[9] Report of the Special Secretarial Offices Committee. National Association of Railroad and Utilities Commissioners (Washington, 1952), pp. 36, 41-42, 46, 49-50, 55.

[10] "Lawyers as Regulatory Commissioners," by Lincoln Smith. *The George Washington Law Review*, March, 1955, pp. 375-428.

[11] (1898) 169 US 466.

[12] A decade or two ago these vocational rivalries on the staff of one commission were so keen that they did not intercommunicate. The gap was bridged somewhat when a university professor got a key man from each compartment to sit next to each other in a graduate seminar.

[13] *"Utility Regulatory Bodies in New York State, 1855-1953"* (Albany, 1953), p. 31.

[14] *Ibid.*, p. 32.

[15] "Should Price Levels Affect Depreciation Accrual?" by Clyde Olin Fisher, PUBLIC UTILITIES FORTNIGHTLY, May 25, 1950, p. 684.

[16] *Ibid.*, p. 685.

[17] "Economic Trends and Utility Regulation," address to Maryland Utilities Association, annual business conference, April 4, 1952, by Herbert B. Dorau, p. 23.

[18] Federal Power Commission *v.* Hope Nat. Gas Co. (1944) 320 US 591, 643-644n, 51 PUR NS 193, 88 L ed 333, 64 S Ct 281.

[19] *"Managerial Enterprise,"* by Oswald Knauth (New York, 1948), pp. 104, 105.

[20] Note 18, *supra.*

[21] Note 17, *supra.*, p. 13.

[22] "The Impact of Economic Trends on Public Utility Regulation," by Herbert B. Dorau. Address delivered at the New York city meeting of the American Bar Association, Section of Public Utility Law, September 17, 18, 1951. Reprinted from the November 8th and 22nd issues, PUBLIC UTILITIES FORTNIGHTLY, pp. 43, 44.

[23] Panhandle Eastern Pipe Line Co. FPC Docket No. G-1116, Opinion No. 269, April 15, 1954, 3 PUR3d 396.

[24] *"The Executive in Action,"* by Marshall E. Dimock (New York, 1945), p. 11.

[25] As one authority cogently declared: ". . . public administration is politics, statecraft." *"Federal Administrative Law,"* by Rinehart John Swenson (New York, 1952), p. 10.

[26] "The Top Manager and His Environment," by Donald C. Stone, in *"The Public Service and University Education,"* Joseph E. McLean, editor (Princeton, 1949), p. 65.

[27] Dimock, *op. cit.*, p. 11.

"MONOPOLIES are ugly and evil things, no prettier on one side of the labor relation than on the other. But there is at present this striking difference, that labor union monopolism is protected by statute law, whereas employer monopolism remains subject to the antitrust laws. It is a situation that cannot endure if the American economy is to remain one of private enterprise under law. But while it lasts there can be no lasting peace in the labor relations field."

—EDITORIAL STATEMENT,
The Wall Street Journal.

Telephone and Telegraph

Frequency Allocation Study

THE Federal Communications Commission is moving to put an end to the scramble between the telephone industry and other utilities and industries for radio frequencies above 890 megacycles. Last November the commission announced that hearings would be held to gather information on microwave, radio, and other allocation problems. Interested parties were asked to submit prospective testimony, with comments due January 7th and replies January 22nd. Private microwave users sought to postpone the hearings until next summer, but the FCC refused to extend deadlines beyond February 19th. The hearings are expected to begin some time in April.

The FCC justified its intention to reexamine frequency allocations in the 890-940 band on grounds that changes and developments in the art of radio and in its commercial use make such a review necessary. The commission noted that where some of the services anticipated twelve years ago have developed to a very great degree, some have failed to develop at all. In some instances, said the commission, the shared uses which have been permitted "appear to be incompatible."

Issues which the hearings are designed to resolve include the effect of private industry systems on telephone company business; the obligation, if any, of the FCC to protect telephone companies against the adverse economic effect of private industry systems; whether restricting or denying frequencies to private industry microwave systems would foster monopoly of communications.

IN a related proceeding, telephone companies are also seeking FCC permission to share for the first time in the 450-460 megacycle radio frequency range. This band of frequencies has heretofore been reserved for gas, electric, and other industrial users. An FCC order handed down last September would have granted the telephone companies the necessary permission, conditioned only on company agreement not to use the frequencies for public service telephone operations but only for nonutility nonprofit intracompany operations.

Opposition from other utility and industrial users led the FCC to "stay" its September order. The Bell system and the United States Independent Telephone Association now seek to have the commission reinstate the order. They point out that telephone companies could make valuable use of these frequencies to communicate with their own construction, service, and maintenance vehicles, and that they would only be used under the

same terms and conditions now applicable to other utility and industrial users.

News via Dial-a-phone

AN innovation in news distribution—just dial a telephone number and find out what is happening—has been started by the jointly owned *Montgomery* (Alabama) *Advertiser* and *Alabama Journal*. According to Southern Bell Telephone & Telegraph Company officials, the initial response has been heavy, calls averaging more than 450 an hour. The company used a monitoring device to record calls attempted while the line was busy as well as completed calls.

The new dial-a-phone service will operate twenty-four hours daily as a means of keeping listeners informed of news developments. Recordings are made hourly in the *Advertiser-Journal* newsroom with supplemental transmissions as the news warrants. Southern Bell officials said they believed the service had never before been tried by a newspaper.

Telephone Use Increases

AMERICAN TELEPHONE AND TELEGRAPH COMPANY's annual survey, "The World's Telephones," reports approximately 101 million telephones in the world at the beginning of 1956, or two telephones for every one in existence ten years previously. About 6.5 million telephones were added during 1955—more than in any other year. The next largest numerical increase for a single year occurred in 1947 when service was being restored in many war-devastated areas.

The United States had 33.7 telephones for every 100 inhabitants, or about one phone for every three persons, leading the world in that respect. Sweden came next with 30.4 per 100 population. At the end of 1955, there were 56,243,000 telephones in service in the United States operated by some 4,700 private companies. At the present time there are more than 59 million telephones in service in this country.

In telephone use, Hawaii headed the list, reporting 647 conversations per capita in 1955. Alaska was second in this category with 572. For the fourth straight year Canada averaged more phone conversations per person (446) than did the United States, which had 409.

Spain reached the million mark in number of telephones in use in the year 1955, as did East Germany. There has been no official report from Soviet Russia since January 1, 1936. At that time, Russia reported 861,181 telephones in service.

All statistics in the annual report are for 1955, since it takes almost a full year to gather the information from some 250 companies throughout the globe.

AT&T Reports Earnings

AMERICAN TELEPHONE AND TELEGRAPH COMPANY had earnings of "slightly above $13 per share" in 1956, according to Frederick R. Kappel, president. In 1955 the Bell system earned $13.10 a share. Kappel said the company added 3.2 million telephones to its system in 1956 or about equal to the high reached in 1946.

Long-distance phone conversations increased nearly 10 per cent in 1956 compared with 1955. AT&T's fast-growing direct distance dialing telephone network rose from some 500,000 phones in 1955 to about 2.5 million phones in 1956. In 1957, the company expects to boost the total to about 5 million phones with direct dialing service slated for such major cities as Minneapolis, St. Paul, Roanoke, and Santa Rosa, California.

Kappel said AT&T is "experiencing

higher costs of construction and operation, including higher wage costs. Telephone rates need to be increased in many areas," Kappel added, "and the Bell companies now have applications pending for rate increases totaling $132 million annually."

Closed-circuit TV Aids Business

CLOSED-CIRCUIT television used as a medium for dissemination of information to the public and employees is gaining an ever-widening acceptance in the business world, reports indicate. The *Atlanta Journal* reports that a number of national companies have beamed telecasts to Atlanta to introduce or promote new products, for sales conferences, or to make a particularly significant announcement with proper fanfare and ceremonial. Programs for a limited audience have been beamed to Atlanta by General Motors, General Electric, Philco, Ford, Westinghouse, Reynolds Metals Company, several pharmaceutical houses, and many others. Local representatives of these companies report excellent results and a gratifying response.

Although the medium is expensive, there are indications that the expenditures are justified. It can reach a properly selected audience all over the nation simultaneously. Also, industries are finding endless new uses of the medium in the production and distribution of their products. It is being increasingly employed for surveillance, inspection, teaching, training, and data handling.

American Telephone and Telegraph Company, which beams national closed-circuit telecasts to Atlanta through the facilities of Southern Bell Telephone & Telegraph Company, reports about a 52 per cent increase in the use of the device on a national scale. Industry-wide sales of closed-circuit TV now amount to about $6 million annually, according to one estimate. But it is predicted that the figure may grow to more than $75 million annually within the next ten years.

Alaska Phone Circuit Opens

THE world's longest "party line"—the 1,250-mile underwater telephone cable connecting Alaska and the United States—opened last month with elaborate ceremonies at the Statler hotel in Washington, D. C. In a special closed-circuit conference call arranged by the Army Signal Corps and the Bell telephone system, government and military officials conversed with officials in Alaska cities 4,600 miles away. More than 50 others listened in on earphones.

The ceremony opened 36 telephone circuits on the Alaska cable system, which government and Bell system officials said would provide fast and reliable communications for northern defense outposts as well as public phone and radio broadcast facilities. A severe storm at Skagway, Alaska, indicated that improvements will be needed at that point in the new $20 million underwater cable. The storm temporarily impaired shore facilities there.

CWA Signs "Good Conduct" Agreement

THE Communications Workers of America union agreed last month to accept an order by the National Labor Relations Board against the international union and 27 locals in the South for strike practices employed during the bitter 1955 strike against the Southern Bell Telephone & Telegraph Company.

According to the company, the action

followed an extensive investigation by the NLRB of charges that union officers "restrained and coerced" Southern Bell employees by attempting to keep them from their jobs during the strike.

The NLRB specifically charged the union with violating §§ 7 and 8 of the National Labor Relations Act. These sections deal with the right of employees to organize, carry on collective bargaining, and to strike. They also guarantee employees the right to "refrain therefrom" when they so elect.

Southern Bell orginally filed the charges against the international union and 115 locals on May 12, 1955, before the end of the strike. The charges were filed with the regional office which conducted the investigation and held a series of hearings.

Charges against 41 locals were dismissed, but the investigators found evidence to support charges against 74 locals. Settlement was reached earlier concerning 47 of the 74 locals.

THE settlement requires the international union and 27 locals to refrain from:

1. Assaulting, physically harming, or otherwise using force or violence against Southern Bell employees and applicants for employment, or attempting or threatening to do so.

2. Picketing the premises of Southern Bell in such a manner as to keep employees, supervisors, and others from entering or leaving the premises.

3. Making threatening telephone calls to employees.

4. Following employees, supervisors, and others from Southern Bell premises in order to restrain or coerce them.

5. Throwing objects at, against, or toward employees entering or leaving Southern Bell premises or at the premises where the employees are working.

6. Restraining or coercing Southern Bell employees by damaging or destroying their property or the property of Southern Bell.

7. In any other manner restraining or coercing employees in the exercise of their rights guaranteed by the National Labor Relations Act.

General Telephone Forms Research Lab

GENERAL TELEPHONE CORPORATION has announced the formation of a new research subsidiary, General Telephone Laboratories, Inc., with headquarters in Chicago. Donald C. Power, president of General Telephone, said the new laboratories will start with the nucleus of the research and development personnel of Automatic Electric Co., principal manufacturing unit of the General Telephone System.

Power said the laboratories will embark on an expanded program of basic research and development in telephone switching and related communications fields, as well as into the area of remote control and by electronic and electromechanical means. Robert W. Wopat, Automatic Electric Co. vice president in charge of research and engineering, has been elected president of the new organization.

Initially, the laboratories will occupy quarters in Automatic Electric Co.'s plant in Chicago. General Telephone, however, is now building a new research and development center at Northlake, Illinois, which the new subsidiary will take over with substantially increased personnel. The new center will include such features as a completely equipped transistor laboratory, chambers for acoustical experiments, hot and cold rooms for temperature and climatic tests, and devices for conducting vibration, life, and environmental studies.

Financial News and Comment

By OWEN ELY

FPC Problem—a Formula for "Revenue Requirements"

MARKETWISE and investmentwise natural gas stocks will remain somewhat "under a cloud" until the question of the character and scope of the regulation to be imposed on independent gas producers is finally settled. The chances appear excellent that the gas utility industry, badly split when the previous bill was considered, will present a more united front when the next bill is introduced (probably early in 1957). Every effort will doubtless be made to avoid any suspicion of questionable influence, which led to the veto of the former bill by President Eisenhower. In the meantime the FPC is confronted with the difficult task of trying to obey the mandates of the federal courts to regulate producers as well as distributors. Confronted by this problem the commission sometime ago asked the industry for its views as to regulatory methods, but apparently no worth-while ideas were forthcoming.

William R. Connole, FPC commissioner classed as a political "independent," gave a recent talk before the New York Society of Security Analysts on the topic "Current Thoughts on Natural Gas Regulation." Early in December the commission dismissed the proceedings in which Union Oil Company of California and certain others were seeking to increase their revenues from sales to Transcontinental Gas Pipe Line Company by about $2.6 million annually. (For digest of Commissioner Connole's address as a whole, see page 123.)

The commission stated in its decision:

> The act requires us to determine the justness and reasonableness of rate levels and structures by the use of standards not contained in the rates themselves. The Constitution extends its protection to all the independent-producing segment as well as to the pipeline segment of the natural gas industry. It is impossible to meet the requirements of either the act or the Constitution unless we can determine the revenue requirements of the industry we must regulate and the effect of the rate in question on its earning capacity. The record as it now stands is deficient in terms of both the act and the Constitution.

DEPARTMENT INDEX

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COMMISSIONER Connole admitted that thus far the FPC had not developed any tangible methods of measuring revenue requirements and determining the adequacy of rates to provide such revenue. "No one has yet demonstrated to my satisfaction," he remarked, "that unadulterated 6 per cent return on depreciated original cost rate base or some equally familiar and computable formula is the complete answer." He suggested that Wall Street analysts could perform a real service in this regard, since as a group they are familiar with the efforts of the gas-producing industry to obtain capital:

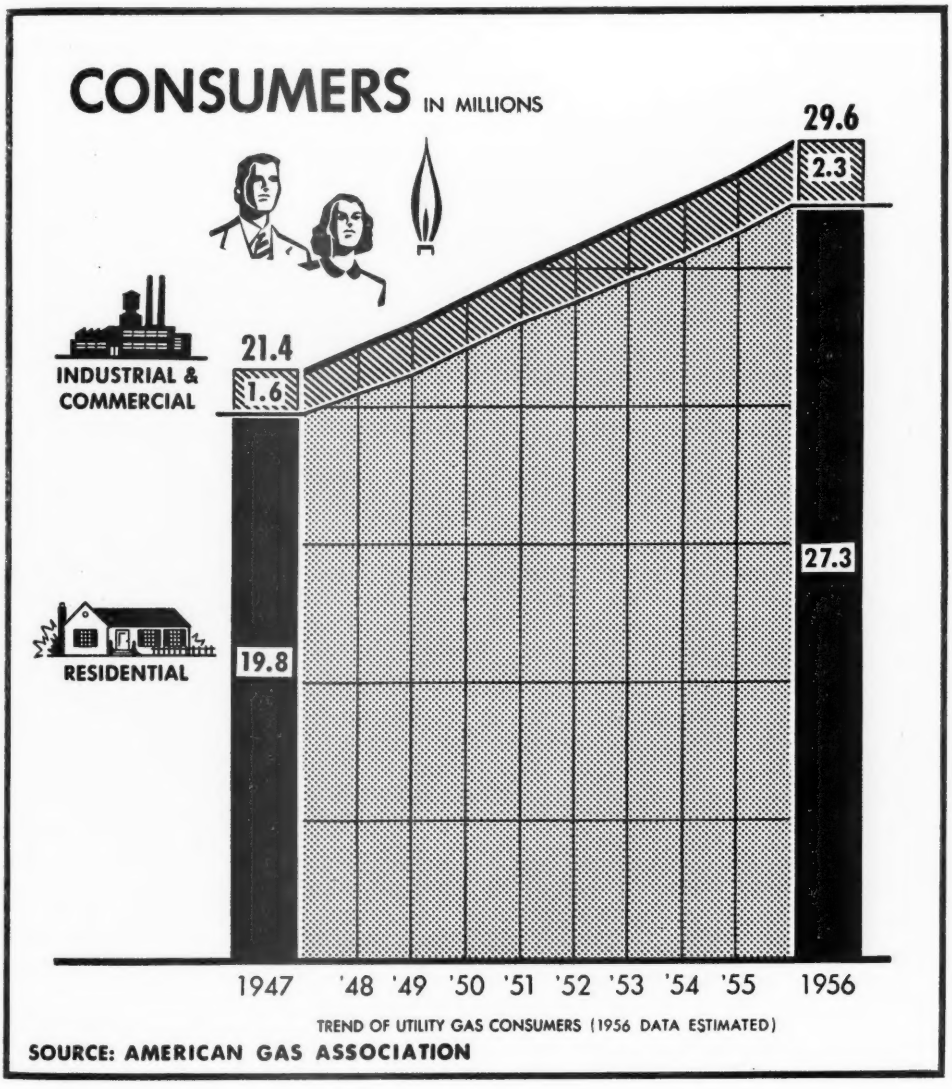
> One of the biggest regulatory problems is how to measure and adequately compensate for the risks involved in exploration and finding and bringing natural gas to market. Here is an area in which the services of those dealing with opportunities for alternative investment every day can make a real contribution, for certainly the risk inherent in a gas-producing enterprise must be subject to measurement. . . . Once the principles governing such an evaluation are determined they will be applied variously to the entire industry, to a segment of it, perhaps a single field, indeed, to one well or to a single corporate entity. The principles developed must stand such tests. . . .
>
> Once the outlines are delineated as I mentioned before, the regulatory process will evolve means of testing justness and reasonableness by comparative means. This is a familiar, workable, and universally accepted method of fixing rates in other utility enterprises.

HE commented on the Interstate Commerce Commission's method of dealing with multiple rate filings by the railroads and other carriers. Railroads with different capital structures and varying costs of operation between common points file rates for the same or similar services. But neither the ICC nor any state commission tries to determine a rate base for each individual road or to determine the reasonableness of the individual rates.

He thought that some similar wholesale method might be developed to permit the FPC to deal with the many thousands of gas applications filed annually. Last year 708 rate applications were filed by gas utilities and 12,000 by gas producers. Obviously it was necessary to suspend many of the latter pending formulation of some regulatory yardstick (supplementary to the field cost method, which the courts deem insufficient) for handling this volume of cases.

As to determination of the risk factor, Mr. Connole was uncertain whether it can best be measured by the amount of capital involved, the operating ratio, or some other method, but if the risk value can once be evaluated "applied common sense, business know-how, and regulatory expertise will then solve technical questions of cost allocation as they have done in the many fields to which regulatory processes have already been applied."

MR. CONNOLE commented on the vast amount of detailed work required for "certification" of independent producers' sales to pipeline companies. He felt, however, that the aim of regulating rates can be effectively achieved through regular rate applications "without employing the cumbersome and unwieldy technique of certification. A modified form of certification specially tailored to the unique conditions found in producer applications might be used. . . . The submission of all proposed rate schedules for approval prior to commencement of service might be sub-


CONSUMERS IN MILLIONS
29.6
2.3
21.4
1.6
INDUSTRIAL & COMMERCIAL
27.3
19.8
RESIDENTIAL
1947
'48
'49
'50
'51
'52
'53
'54
'55
1956
TREND OF UTILITY GAS CONSUMERS (1956 DATA ESTIMATED)
SOURCE: AMERICAN GAS ASSOCIATION

stituted for the certification process. . . . The attachment of rate conditions seems the only useful function in the public interest to be served by certification. It would be fairer to restrict certification activities to that purpose."

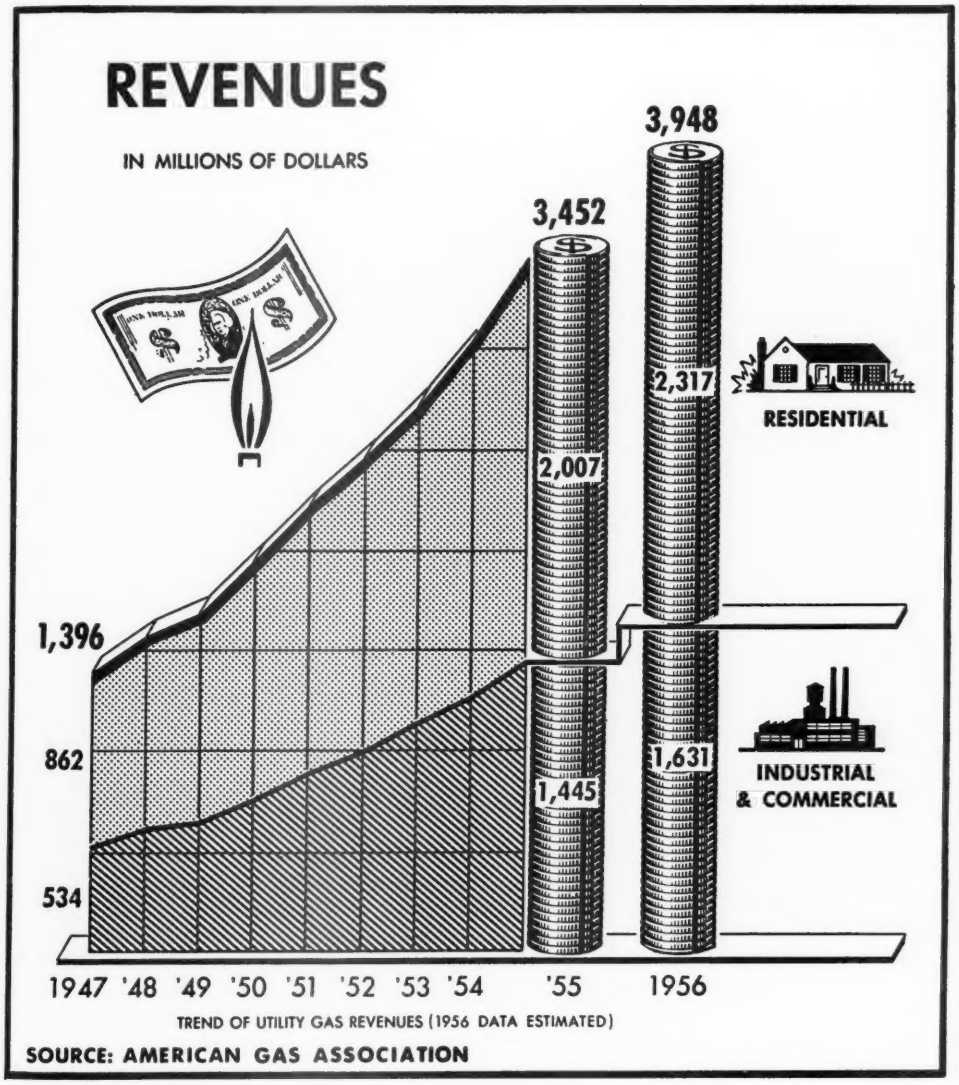
MR. CONNOLE has set up what appears to be a most difficult problem for the Wall Street utility analyst. In cases involving small independent gas producers, with a few producing gas wells, the problem of cost accounting and revenue requirements may be comparatively simple. But for the large producers it becomes terrifically complex. The main trouble is to allocate general overhead both territorially and between oil and gas; for the fully integrated gas utility, with production, transportation, and wholesale and retail sales of gas, the problem of determining unit production cost is even more involved.

Of course direct drilling and operating costs can be determined. But who will determine how much wildcatting expense, and how many dry holes, combined with one good producing well, represent a reasonable risk factor—or whether they are evidence of bad management or unreasonable speculation? It is easy enough to say that the management and the company's bankers are always gauging the risks involved in exploration of new territories and the expense of new drilling. But it should be noted that with the average company of any size, the bankers do not assume the risk of any particular drilling campaign in making their loans, or in underwriting securities for public sale. These decisions are usually based on the company's past record of success as reflected in earnings, which may be a composite of numerous ventures in many areas, both in gas and oil.

It may be surmised that many officials of large companies, in planning new wildcatting or drilling, take advantage of the old "joint cost" theory. They probably assume that, if the revenue from the new enterprise covers the immediate drilling cost and leasehold rentals or royalties, it will not need to cover much, if any, of the company's general overhead, which already exists. Thus the problem of cost accounting is greatly simplified. But the regulatory commission cannot do this. It must not only take into account the direct costs, but a fair percentage of the overhead cost—administration and accounting, depreciation and depletion, taxes of all kinds, and cost of capital.

COMMISSIONER Connole referred to the similarity between this problem and that confronting the ICC in the regulation of groups of freight rate filings. If he were referring only to railroad costs, there are relatively few variables as compared with a growing, dynamic oil-gas enterprise; there is no wildcatting, few if any venturesome forays into new traffic areas. There are many more cost variables, of course, in motor carriers rate filings with the ICC.

There may be competition between different roads serving the same areas but this is much less severe than it was in the "old days" (such as the 1870's) before the industry was regularized and regulated. Even so cost allocations are difficult. It is necessary first to figure direct operating costs which may be a small fraction of the total freight cost. Then it is necessary to allocate maintenance work, depreciation, taxes, and general overhead (1) territorially, (2) between freight and passenger service, and (3) between different divisions of the freight business. Originally this involved the development of complicated formulas by expert analysts; in later years the ICC itself has allocated costs between freight and passenger service, although the commission's formula is


REVENUES
IN MILLIONS OF DOLLARS
3,948
3,452
2,317
2,007
RESIDENTIAL
1,396
862
534
1,631
1,445
INDUSTRIAL
& COMMERCIAL
1947 '48 '49 '50 '51 '52 '53 '54 '55 1956
TREND OF UTILITY GAS REVENUES (1956 DATA ESTIMATED)
SOURCE: AMERICAN GAS ASSOCIATION

now reported to be under fire from some quarters.

Commissioner Connole notes that the independent oil and gas producers have not thus far developed any useful formulas for allocating cost and/or "revenue requirements." Reasons for this, more practical than legal, perhaps, may be that (1) the industry has been hopeful that the courts would permit continued reliance on the "field price" yardstick; (2) they may have hoped that Congress would soon pass new legislation; or (3) they may have been reluctant to go to the expense and trouble of developing complex methods of cost allocation until the FPC itself has indicated its views. Now the Union case has been decided and the FPC duties clarified, but there is still the possibility of new legislation early in 1957. If it becomes obvious that this will be delayed indefinitely, the industry will doubtless put experts to work developing new formulas for use in presenting evidence to the commission in rate cases.

It is noteworthy that the commission has not given any indication that it intends to return to the theory of "cost of capital" which played so important a rôle in FPC cases under the Truman administration. At that time the FPC staff and in some cases the commission itself seemed anxious to set as low a rate of return as possible, based on permutations and combinations of historical costs of financing, with little or no allowance for the risk factor in new drilling. The FPC as now constituted has taken a broader and, from the investment point of view, a more constructive attitude and it is to be hoped that (in the event Congress does not enact new legislation) it will continue such policy and not become devoted to any narrow methodology.

It might be possible, with the use of data compiled by AGA, INGAA, API, and the federal agencies, to work out some regional yardsticks such as (1) the average cost of drilling new wells in each of the states or in major fields; (2) the average number of dry wells for each producing well; and (3) the resulting average cost per producing well. To this would be added the average purchase or rental cost. Then it would be necessary to add an estimated amount for general overhead, determined by the ratio of drilling costs to total costs for representative producing companies in the area. These regional yardstick costs would correspond to, but be a refinement of, the area field price—which the courts evidently feel may be affected too much by demand and supply factors, rather than cost factors.

In attempting to compile data it may be necessary to speed up some of the industry statistics. For example, the number of producing wells, the average wellhead price, and value at point of consumption were only available for 1954 in the latest issue of *"Gas Facts"* published in September, 1956, by the AGA. (These figures are compiled for each state by the U. S. Bureau of Mines and republished by AGA.)

Perhaps some yardstick data could be developed from the 1955 "Statistics of Natural Gas Companies," published in November, 1956, by the FPC, which contains much detailed data for individual companies on production and gathering costs, as well as investment cost figures for "natural gas production plant." By dividing drilling and related costs by the number of producing gas wells, it might be possible to gauge drilling costs by areas. The statistics also show the cost of exploration and development (delay rentals, nonproductive well drilling, abandoned leases, and other exploration costs). These

items combined would give the direct cost. General overhead would have to be added, first by allocating a certain amount to production costs as compared with transmission and distribution, etc., and then producing this to a unit basis. Of course, if such data could be obtained for the independent producers they would be more accurate, since overhead would apply to production only.

It will be interesting to see what can be done in the way of devising yardsticks.

Tennessee City Problems

TENNESSEE'S four big cities will ask little of the new state legislature, but are looking to Uncle Sam for a least part solution, paternalistic or not, to their mounting problems.

The question of "tight money" is, of course, involved in their expansion plans, certainly as involving bond issues at the present high rates.

Memphis got the whopping big taste of this when it issued and sold its $165 million municipal power plant bonds recently, paying some 4.5 per cent interest in the gigantic deal for one city. Revenues from the power will carry the interest and amortization schedule, but whether an increase in the now-cheap TVA rates will be necessary or not is a big question. The city overwhelmingly approved the issue made necessary by the congressional curb under the Eisenhower policy on TVA and the cancellation of the Dixon-Yates contract by which Memphis would have been forced to buy its power from the private utility combination.

RECENT FINANCIAL DATA ON GAS UTILITY STOCKS

Rev. (Mill.)			*12/26/56 Price About*	*Dividend Rate*	*Approx. Yield*	*Recent Share Earns.*	*% Increase*	*Aver. Incr. In Sh. Earns. 1951-55*	*Price-Earns. Ratio*	*Div. Payout*	*Approx. Common Stock Equity*
		Pipelines									
$ 4	O	Ala.-Tenn. Nat. Gas	20	$1.20	6.0%	$1.45Se	13%	17	13.8	83%	37%
15	O	Commonwealth N. G. ..	30	1.40	4.7	2.72Se	7	X	11.0	52	37
16	O	E. Tenn. Nat. Gas	9½	.60	6.3	.82Se	46	X	11.6	73	18
48	S	Miss. River Fuel	33	1.60	4.8	2.17Se	16	6	15.2	74	52
69	S	Southern Nat. Gas	38	2.00	5.3	2.70Se	25	3	14.1	74	33
200	O	Tenn. Gas Trans.	28	1.40	5.0	1.91Se	21	17	14.7	73	22
163	O	Texas East. Trans.	25	1.40	5.6	2.12Se	12	5	11.8	66	23
71	O	Texas Gas Trans.	22	1.00	4.5	2.21Se	31	D	10.0	45	27
75	O	Transcont. Gas P. L. ...	17½	1.00	5.7	1.28Se	18	17	13.7	78	19
		Averages			5.3%				12.9	69%	
		Integrated Companies									
127	S	American Nat. Gas	64	$2.60	4.1%	$4.66Se	66%	8	13.7	56%	35%
50	A	Arkansas-Louis. Gas ...	22	1.20J	5.5	1.45Se	NC	10	15.2	83	53
44	O	Colo. Interstate Gas	74	1.25	1.7	5.28Se	NC	45	14.0	24	35
304	S	Columbia Gas System ..	17	.90	5.3	1.52Se	38	3	11.2	59	44
8	O	Commonwealth Gas	6	.10	1.7	.26De	D51	D	—	38	72
10	A	Consol. Gas Util.	15	.90	6.0	1.83Jy	87	D	8.2	49	53
240	S	Consol. Nat. Gas	40	1.90	4.8	3.26Se	21	O	12.3	58	70
178	S	El Paso Nat. Gas	59	2.60	4.4	4.20Se	61	O	14.0	62	22
40	S	Equitable Gas	28	1.60	5.7	2.31Se	20	4	12.1	69	32
15	O	Kansas-Nebr. Nat. Gas ..	34	1.65	4.9	2.63Se	30	3	12.9	63	32
88	S	Lone Star Gas	34	1.80	5.3	2.35Se	11	5	14.5	77	39
23	S	Montana-Dakota Util. ..	24	1.00	4.2	1.51Se	11	25	15.9	66	30
21	O	Mountain Fuel Supply ..	25	1.20	4.8	1.65Se	9	8	15.2	73	59
72	S	National Fuel Gas	19	1.10	5.8	1.66Se	6	8	11.4	66	58
108	S	Northern Nat. Gas	49	2.20	4.5	3.50Se	11	26	14.0	63	34
43	S	Oklahoma Nat. Gas	27	1.40	5.2	2.12O	17	6	12.7	66	29
99	S	Panhandle E. P. L.	104	3.00	2.9	5.01De	18	16	20.8	60	32

11	O	Pennsylvania Gas	24	1.00	4.2	1.63De	D10	D	14.7	61	68
159	S	Peoples G. L. & Coke ...	161	8.00	5.0	12.86Se	18	6	12.5	62	40
31	O	Southern Union Gas	25	1.12	4.5	1.69De	28	15	14.8	66	34
215	S	United Gas Corp.	32	1.50	4.7	2.21Se	5	7	14.5	68	41
		Averages			4.5%				13.7	64%	
		Retail Distributors									
28	A	Alabama Gas	35	$1.60	4.6%	$2.40Se	19%	31	14.6	67%	42%
44	O	Atlanta Gas Light	29	1.60	5.5	2.75Se	23	2	10.5	58	33
5	O	Berkshire Gas	15	.90	6.0	1.34Au	111	46	11.2	67	37
4	O	Bridgeport Gas	28	1.50	5.4	2.57Se	22	48**	10.9	58	44
4	O	Brockton-Taunton Gas ..	17	.90	5.3	.85De	30	42	20.0	106	36
55	S	Brooklyn Union Gas	35	2.00	5.7	2.96Se	17	5	11.8	68	47
1	O	Cascade Nat. Gas	10	—	—	Def.De	—	—	—	—	41
33	O	Central El. & Gas	17	.90	5.3	1.67Se	28	9	10.2	54	17
11	O	Central Indiana Gas	13	.80(b)	6.2	1.08Se	13	D	12.0	74	64
5	O	Chattanooga Gas	6	.30	5.0	.47Au	38	14	12.7	64	45
66	O	Gas Service	24	1.36	5.7	2.26Se	23	O	10.6	60	41
6	O	Hartford Gas	38	2.00	5.3	2.50Ma	15	D	15.2	80	52
2	O	Haverhill Gas	19	1.20	6.3	1.87N	46	14	10.2	64	55
31	O	Houston Nat. Gas	38	1.50	3.9	2.26Jy	24	6	16.8	66	22
16	O	Indiana G. & Water	21	1.00(k)	4.8	1.62Se	17	9	13.0	62	47
6	A	Kings Co. Lighting	16	.90	5.6	1.22Se	10	7	13.1	74	28
45	S	Laclede Gas	16	.80	5.0	1.21Se	25	2	13.2	66	34
4	O	Michigan Gas Utils.	20	1.00	5.0	1.31De	5	14	15.3	76	43
4	O	MidSouth Gas	13	.15	1.2	.72De	71	D	18.1	21	34
37	O	Minneapolis Gas	25	1.30	5.2	2.27Se	43	10	11.0	57	38
14	O	Miss. Valley Gas	20	1.12(d)	5.6	1.92Se	14	—	10.4	58	28
5	O	Mobile Gas Service	22	1.00	4.5	1.23Se	D20	D	17.9	81	33
7	O	New Haven Gas	31	1.60	5.2	2.39De	7	17	13.0	67	63
10	O	New Jersey Nat. Gas	23	1.20(i)	5.2	2.11Ma	40	—	10.9	57	31
70	O	No. Illinois Gas	18	.88	4.9	1.48O	33	—	12.2	59	49
8	O	North Penn Gas	13	1.00	7.7	.83De	D33	1	15.7	120	57
183	S	Pacific Lighting	36	2.00	5.6	2.90Se	7	33	12.4	69	44
15	O	Pioneer Nat. Gas	27	1.32	4.9	1.89Je	NC	19	14.3	72	53
13	O	Portland Gas & Coke	29	1.00	3.4	2.10Se	D6	9	13.8	48	40
2	O	Portland Gas Light	10	.75	7.5	1.22De	13	—	8.2	61	25
8	A	Providence Gas	9½	.56	5.9	.59De	16	16	16.1	95	64
3	A	Rio Grande Valley Gas .	3	.15	5.0	.26Je	—	9	11.5	58	63
3	O	So. Atlantic Gas	13	.80	6.1	.89De	12	D	14.6	90	35
9	O	South Jersey Gas	24	1.40	5.8	2.10Au	34	23	11.4	67	52
24	S	United Gas Impr.	37	2.00	5.4	2.41Se	16	D	15.4	83	64
33	S	Wash. Gas Light	38	2.00	5.3	3.48Se	31	4	10.9	57	42
8	O	Wash. Nat. Gas	15	.40	2.7	.34Se	D33	—	—	117	67
6	O	Western Ky. Gas	14	.60	4.3	1.24Ma	NC	29	11.3	48	35
		Averages			5.2%				13.1	69%	

RECENT FINANCIAL DATA ON TELEPHONE, TRANSIT, AND WATER STOCKS

Rev. (Mill.)			*12/26/56 Price About*	*Dividend Rate*	*Approx. Yield*	*Recent Share Earns.*	*% Increase*	*Aver. Incr. In Sh. Earns. 1951-55*	*Price-Earns. Ratio*	*Div. Payout*	*Approx. Common Stock Equity*
		Communications Companies									
		Bell System									
$5,297	S	Amer. T. & T. (Cons.) .	169	$9.00	5.3%	$13.37Au*	5%	3	12.6	67%	64%
245	A	Bell Tel. of Canada	48	2.00	4.2	2.43De*	—	3	19.8	82	63
40	O	Cin. & Sub. Bell Tel. ..	86	4.50	5.2	5.45De	6	5	15.8	83	100
187	A	Mountain Sts. T. & T. ..	120	6.60	5.5	8.71Au	2	10	13.8	76	78
285	A	New England T. & T. ..	132	8.00	6.1	9.16Se	14	6	14.4	87	60
715	S	Pacific T. & T.	124	7.00	5.6	9.62Se	NC	5	12.9	73	58
89	O	So. New Eng. Tel.	39	2.00	5.1	2.06Je	NC	1	18.9	97	64
		Averages			5.3%				15.5	81%	

		Independents									
4	O	Anglo-Canadian Tel.	30	$ .60	2.0%	$1.76Se	NC	19	17.0	34%	48%
33	O	British Col. Tel.	45	2.00	4.4	3.32Se	6	22	13.6	60	28
2	O	Calif. Inter. Tel.	11	.70	6.4	.87Se	D17	—	12.6	80	30
13	O	Calif. Water & Tel.	19	1.20	6.3	1.46De	20	11	13.0	82	42
14	O	Central Telephone	20	1.00	5.0	2.15Se	13	14	9.3	47	25
3	O	Commonwealth Tel.	14	.80	5.7	1.31De	27	26c	10.7	61	32
3	O	Florida Telephone	17	.80	4.7	.88De	10	D	19.3	91	40
210	S	General Telephone	40	1.80	4.5	3.03O	NC	31	13.2	59	34
15	O	Hawaiian Telephone	18	1.00	5.6	1.38N	3	19	12.9	72	47
5	O	Inter-Mountain Tel.	13	.80	6.2	.94Je	—	10	13.4	85	55
19	S	Peninsular Tel.	40	1.80	4.5	2.05Se	D10	5	19.5	88	46
19	O	Rochester Tel.	18	1.00	5.6	1.75O	NC	4	10.3	57	34
3	O	Southeastern Tel.	15	.90	6.0	1.36Se	43	13	11.0	66	42
8	O	Southwestern St. Tel. ...	18	1.12	6.2	1.48Je	36	1	12.2	76	42
28	O	United Utilities	20	1.20	6.0	1.43Se	D13	8	14.0	84	31
12	O	West Coast Tel.	17	1.00	5.9	1.24Se	2	25	13.7	81	43
242	S	Western Union Tel.	19	1.00	5.3	2.10De	39	19	9.0	48	85
		Averages			5.3%				13.2	70%	
		Transit Companies									
22	O	Baltimore Transit	10	$1.60	16.0%	$1.27De	120%	X	7.9	126%	40%
13	O	Cincinnati Transit	5	.30	6.0	.34De	16	—	14.7	88	43
9	O	Dallas Transit	5	.35	7.0	.57De	D48	D	8.8	61	51
31	S	Fifth Ave. Coach Lines .	26	2.00	7.7	2.85De	D3	O	9.1	70	100
225	S	Greyhound Corp.	14	1.00	7.1	1.15Se	D11	D	12.2	87	52
21	O	Los Angeles Transit	16	1.40	8.8	.94De	D5	5	17.0	149	89
27	S	Nat. City Lines	21	2.00	9.5	2.74De	D1	11	7.7	73	93
13	O	Niagara Frontier Trans.	8½	.15	1.8	1.47De	—	14	5.8	10	78
70	O	Phila. Transit	10	.30	3.0	1.27De	390	D	7.9	24	42
6	O	Rochester Transit	5½	.40	7.3	.43De	D2	D	12.8	93	40
23	O	St. Louis P. S.	11	1.40	12.7	.68De	D15	28	16.2	206	91
16	S	Twin City R. T.	17	1.80	10.6	Def.De	—	D	—	—	41
22	O	United Transit	5	.60	12.0	1.03De	94	36	4.9	58	48
		Averages			8.4%				10.4	87%	
		Water Companies									
		Holding Companies									
34	S	American Water Wks. ..	9	$ .50	5.6%	$1.04Se	10%	6	8.7	48%	16%
		Operating Companies									
4	O	Bridgeport Hydraulic ..	31	$1.60	5.2%	$2.04De	12%	4	15.7	78%	57%
11	O	Calif. Water Service	39	2.20	5.6	2.80O	5	0	14.0	79	29
3	O	Elizabethtown Water ...	37	1.00	2.7	3.01Ap	NC	36	12.3	33	56
9	S	Hackensack Water	41	2.00	4.9	3.60De	10	11	11.4	56	37
8	O	Indianapolis Water A ..	19	.37	2.0	1.59De	27	27	11.7	23	33
5	O	Jamaica Water	33	2.00	6.1	2.94Se	—	10	11.2	68	25
4	O	New Haven Water	58	3.00	5.2	3.32De	D3	4	17.5	90	63
2	O	Ohio Water Service	26	1.50	5.8	2.74Se	42	5	9.5	55	38
7	O	Phila. & Sub. Water ...	30	.50(e)	1.7	2.20De	11	D	13.6	23	29
2	O	Plainfield Un. Water ...	67	3.00	4.5	5.47De	37	8	12.2	55	40
3	O	San Jose Water	45	2.00	4.4	3.52Se	3	10	12.8	57	43
9	O	Scranton-Springbrook ..	16	.90	5.6	1.44Se	10	8	11.1	63	29
4	O	Southern Calif. Water ..	13	.80	6.2	1.08Je	4	8	12.0	74	34
3	O	West Va. Water Service	23	1.40	6.1	1.85Se	41	1	12.4	76	17
		Averages			4.7%				12.7	60%	

A—American Stock Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. #July, 1955. Ja—January; F—February; Ma—March; Ap—April; My-May; Je—June; Jy—July; Au—August; Se—September; O—October; N—November; De—December. (b)—Paid 10 per cent stock dividend. (c)—1952-55. (d)—Paid 25 per cent stock dividend. (e)—Also paid 5 per cent stock dividend. (h)—Paid 25 per cent stock dividend. (i)—Paid 2 per cent stock dividend. (j)—Paid 10 per cent stock dividend. (k)—Paid 3 per cent stock dividend. NC—Not comparable. NA—Not available. D—Decrease. X—Deficit in 1951. *On average shares. **Nineteen hundred and fifty-one was an abnormally bad year.

What Others Think

Judicial Back-seat Driving and Regulatory Progress

A VIGOROUS defense of the administrative process against "inappropriate judicialization" appears in an article in the current issue of the *Federal Bar Association Journal.* The author is Willard W. Gatchell, general counsel of the Federal Power Commission, on whose legal staff he has served since 1931.

Proposed changes in administrative procedures are designed to give supremacy to individual, private rights and prerogatives, Gatchell acknowledged, whereas the present procedures recognize and safeguard private rights but primarily provide for the protection and enhancement of public interests. But Gatchell refuses to concede that private rights are injured under present procedures or that the general public interests can be advanced if the proposed measures are adopted. Gatchell states:

> Merely because certain stylized legal procedures, organizations, forms, and principles have been found suitable in other times for the determination and protection of other personal and property rights, there is no reason to believe that the judicial adaptations now proposed for certain administrative processes are any improvement or that they would even accomplish the purposes for which they are suggested. We should not abandon nor nullify administrative processes which have been and are effective until it is demonstrated that the changes proposed are actually improvements and are suitable for the conditions to which they would be applied.
>
> . . . We are in agreement with the purposes of those who seek to improve the administrative process in so far as they seek to provide practical, expeditious, and fair administrative procedures to advance the public interest in regulated industries and do not destroy the definite assignment of responsibility for the fair, impartial conduct of regulation within reasonable time limits. We differ only as to the methods for improvement within these purposes.

HERETOFORE, judicial examination of administrative agency actions has been carefully limited to legal questions, Gatchell pointed out. Agency heads have been left with the primary responsibility for factual determinations, the presumption being that the regulatory agencies are carrying out congressional policies. The proposals now under consideration seriously alter this process. They would create an independent corps of hearing examiners, restrict review of factual findings, create an administrative court, and greatly expand judicial review of admin-

istrative factual findings, policy determinations, and legal decisions. Although the proposals, sponsored by the American Bar Association Special Committee on Legal Services and Procedures, stem directly from recommendations of a Hoover Commission Task Force, Gatchell noted that the Hoover Commission itself neither supported the recommendations nor approved the draft legislation prepared by the Task Force to carry them out.

A key proposal criticized by Gatchell is that there be created a federal administrative court, with original jurisdiction under Article III of the Constitution, to decide certain types of fair trade and labor relations cases now handled by the Federal Trade Commission and the National Labor Relations Board. "The nose of the judicial camel thus to be introduced into the administrative tents of fair trade and labor practices is certain to be quickly followed by the full judicial body into those administrative tents and thereafter into other regulatory tents, with the complete ousting of the administrative processes which are presently effective," Gatchell writes. "On the surface, at least, this would appear to be the entering wedge by which a return to full judicial control is to be accomplished."

THE trouble with such a scheme, said Gatchell, is that it does not take into account the differences between operations and activities in different industries as presently regulated. For example, fair trade authority of all federal agencies would be transferred to the new court without regard to the specialized regulation remaining in the agencies from which the transfers of control are to be made.

Seven agencies now deal with undue preferences, discriminations, and monopolies. Four of these—the FCC, ICC, CAB, and FPC—deal with utilities where some degree of monopoly is the rule and where the factors in each industry giving rise to improper trade restrictions, preferences, or discriminations are not only so complex but so interrelated to other facets of that industry that the isolation of one monopoly factor is generally extremely difficult and usually must be accompanied by other regulatory measures.

"Could the new administrative court," Gatchell asks, "after handling a fair trade case involving motor carriers or railroads turn with equal facility to the fair trade problems now coming before the FPC under either the Natural Gas Act or the Federal Power Act or coming before the CAB or the FCC under the statutes presently administered by those agencies, and could it decide with that expertness, fairness, and informed judgment which these involved problems require without regard for other regulatory measures being imposed by those agencies?"

GATCHELL was highly critical of a draft bill to amend the Administrative Procedures Act which was prepared by a committee of the administrative law section of the American Bar Association, and which would provide that court review of agency actions start in the United States district court instead of a court of appeals as at present. Gatchell said:

> . . . With this additional step added to the present procedures, no applicant could be assured of a license or certificate of public convenience and necessity in less than four or five years or longer if a determined opponent availed itself of the delays offered by the bill. While this section of the bill would not make district court review available "where a statute provides for judicial

review in a specified court," if the principle of district court review, in addition to the review now provided, is sound, there would be little reason for the exception. And, it is entirely probable that since any present exception would be inconsistent with the policy of the bill to enlarge judicial review, the only exceptions intended are those to be *hereafter specified by Congress.*

Another difficulty with the draft bill, said Gatchell, is the authority it gives to any court at any time to enjoin any agency proceeding while it determines constitutional or statutory authority. Interlocutory appeals could be taken at any stage. This would eliminate the requirement that the administrative process be completed before judicial examination as at present. Judicial review would be further enlarged by permitting court scrutiny of action committed to agency discretion, now excepted under § 10 of the Administrative Procedures Act. Court review would be available both for abuse of discretion and for "clearly unwarranted exercise of discretion." Said Gatchell:

> . . . These and other provisions of the bill are drawn so as to substitute untrained and inexperienced judicial discretion in complex utility operation for agency discretion, constricting the agencies at every turn, increasing the possible number of court review cases, broadening the scope and effect of judicial examination, and abrogating many of the doctrines and limitations which have been so painstakingly evolved over the years.

ONE change sought to be introduced in connection with the enlarged scope of judicial reform is the substitution for the substantial evidence rule of a new test —the test now applied by an appellate court in reviewing decisions of fact by the district courts in nonjury cases. Through this provision, a district court would have authority to substitute its judgment both as to facts and as to the application of those facts to a given situation in any regulated industry and to give to the agency determination no more weight than to the decision of a nonexpert trial judge. The court, of course, would apply its interpretation of the law to the facts which it finds from the record.

Stressing the undesirability of such a procedure, Gatchell explained:

> . . . Whenever a court differed in its judgment from the judgment of a specialized and expert agency charged by Congress with the responsibility for carrying out congressional policies and directives in not only the particular case under court review but in all other situations coming within the purview of the statute, the court would be thus inclined and encouraged to substitute its judgment for that of the agency even if the judicial judgment in that particular instance might be contrary to the judgment policies being enforced by the agency with respect to other companies in similar factual circumstances. This is a factor to be considered, for it further demonstrates the dissipation of responsibility inherent in the proposals.

A FATAL weakness in the draft bill, according to Gatchell, is its attempt to standardize procedures before all regulatory agencies, except those expressly exempted by Congress. On this point, Gatchell stated:

> The judicial procedures which have been developed for the settlement of private adversary litigation may be standardized and may even possess the benediction of antiquity, but they are not adaptable to effective governmental

action in the regulation of complex and specialized industries. Moreover, assuming standardization to be possible, as proposed, it has not been shown that standardization would more adequately protect public or private rights and interests or the broader interests of the general public than those rights and interests are protected under present procedures or that the policies of Congress could even be carried out with any semblance of orderly effectiveness, consistency, or dispatch. Certainly, under the definite probability of multiplicity of judicial interpretations the claim to uniformity is unwarranted, since the only uniformity that could be realistically anticipated would be uniformity in judicial procedures imposed upon the agencies and not in the scope, effect, direction, number, or application of judicial review decisions, and it is the latter which go to the substance.

Furthermore, with rapidly and constantly changing economic conditions with which each regulatory agency deals, the addition of further judicial delays upon the already protracted administrative proceedings means serious tampering with our whole national economy. Each regulatory agency was established only after serious dislocations of the economy had demonstrated an absolute necessity for federal guidance and control of that particular industry through agency regulation in which responsibility could be lodged with certainty. Instead of the present centralization of responsibility under the presently effective judicial scrutiny, the changes proposed would substitute judicial confusion with almost complete dissipation of responsibility. There is some assurance now, for example, that regulated rates will be just and reasonable, nondiscriminatory, and not unduly preferential and that services will be permitted in interstate commerce in certain activities and certain industries only when they are found to be in the public interest and then only under adequate prescribed safeguards. Under the proposals now being considered, these assurances would disappear but the consequences cannot be foretold.

GATCHELL said the attempt to interpose a courtlike procedure, with a one-man judge of the facts, in the middle of the regulatory process developed by decades of utility commission experience would be to return to procedures long since abandoned as then inadequate for even the much slower tempo of those times. The result would be "to make regulation so much slower and less effective as to become a delusion creating a false sense that the public interest was being protected when in fact it could not be."

The proposed new procedures, Gatchell continued, seem to ignore the realities of the situation. He pointed out that the monopolistic character of electric and gas utilities make commission regulation an essential prerequisite to a sound national economy in which the users are assured of fair treatment. Moreover, utility regulation is a highly technical and complex subject, involving "facts" which are hydrological, electrical, geological, chemical, industrial, economic, and financial. Engineers, scientists, economists, accountants, and other specialists are required to observe and evaluate such facts. "Furthermore," Gatchell added, "such statutory standards as 'public convenience and necessity' and 'just and reasonable rates' and similar generalizations are not legal standards having any reality independent of the 'facts' of a particular case. Rather, legal specialists must co-

perate with technical specialists to develop the 'facts' and 'law' applicable in a given situation and the consideration of 'facts' and 'law' interacts to generate the decisions in which 'facts' are indistinguishable from 'law.' "

GATCHELL insists that any attempt to divide the process of reaching conclusions and taking action thereon from the process of observing and evaluating the "facts" and the "law" between agency heads and an independent corps of single fact finders, who cannot combine the many special abilities required, would unavoidably sacrifice more than it could possibly gain. For one thing, he notes, utility regulation is legislative in character, prescribing rules governing future action which are based on a forecast of future conditions. Such a forecast, he explains, is the result of expert judgment grounded in a complex of mutually interacting facts and law.

Moreover, he continues, the reality that in important areas of utility regulation the agency must use an *ad hoc* approach to develop the application and implementation of the statutory standards to the problems, subject to its jurisdiction, is incompatible with the proposed separation of the fact-finding function. He explains:

> . . . Instead of depending upon the accidental vagaries of private litigation to build a body of case law to fill the interstices of the statute, the regulatory agency selects cases to be initiated with a view to extending and testing basic analysis and theory and broadening the existing body of knowledge in the areas most important to the overall regulation of the industries subject to its jurisdiction. Informing itself through extensive investigatory procedures, through analysis of comprehensive annual and special reports by the utilities, and through exercise of its statutory right of free access to all of the facilities and records of the regulated utilities, the agency initiates action first on the particular problems and in the particular cases in which the respondent utility's views and presentation of facts are expected to be of maximum general value.
>
> These individual cases are important primarily as aids in the legislative process of prescribing rates or facilities and service for the future and laying out broad principles applicable to classes of companies or to types of operations. They are not designed for primary significance in the resolution of differences with the respondent companies on what the "facts" are. This broad use of cases not only for prescription of rules in a particular action, but also as an aid to subsequent rule making, would be frustrated under the proposals, because independent fact finders, lacking the combined special abilities of accountants, engineers, economists, financial analysts, geologists, and other technical specialists, as well as trained lawyers, would not approach the case with the same grasp which the agency has of the significance of the particular case in its relationship to the total problem of utility regulation. Nor could the individual fact finder possibly have the broad understanding of the general principles being evolved unless he also regulated the other companies in similar situations, a function assigned to the regulatory agency even under the proposals. There cannot be two drivers, much less twenty drivers.

ANOTHER outstanding aspect of agency utility regulation, Gatchell continues, is its expertise resulting from a high degree of specialization over a long period

of time. In its approach to problems, diverse thinking, attitudes, and competencies of a multimember deliberative body are brought to bear. A broader judgment is achieved through the interchange of views which a lone fact finder, no matter how competent, could hardly be expected to approach. To separate the findings of fact in an adequate corps of trial examiners or in an administrative court would, says Gatchell, completely nullify some of the most important achievements of sixty years of utility regulation.

Finally, Gatchell states, the proposals to interpose courtlike procedures find no support in the history of utility regulation. According to Gatchell, that history "shows that the common law right to reasonable and nondiscriminatory utility and carrier rates and services, enforced by single-judge law courts (subject to review by multijudge appellate courts), simply would not work. The standard was one which experience proved could not be applied to the adjudication of individual cases by the judicial process, but was at best a legislative standard, to be applied prospectively in more specific terms."

In short, Gatchell concluded, the experience of federal regulatory agencies makes plain that precedent plays a different subordinate rôle in administrative proceedings than in those in which it is only necessary to apply established rules of law, as shown by the precedents, to controversies over actual facts in individual cases. "The decision of utility regulatory matters," he said, "cannot be a mere lawyer's search for the most nearly applicable precedents. In its most significant aspects, there must always be more if regulation is to be effective. Because the present proposals would effectively contravene and nullify this inherent principle, they are wholly inappropriate for the regulatory agencies."

Connole Balks at Advisory Regulation

THE action of the Federal Power Commission, early last month, in dismissing an application of Union Oil Company of California for a gas rate increase has provoked some uneasiness in the natural gas industry over the failure of the Federal Power Commission to find a suitable uniform rate-fixing standard for producers. The case was dismissed because the evidence submittted by Union Oil—limited to evidence of arm's-length bargaining and the fair field price of gas in the producing area—was deemed insufficient to enable the commission to make a determination of a just and reasonable rate level.

The commission's action in the Union Oil case was explained and justified late last month, in an address to the New York Society of Security Analysts by Federal Power Commissioner William R. Connole, who provided as well some hints as to the significance of the direction which the commission's regulation of independent producers is taking. (For financial analysis, see page 109.) Connole warned the analysts to avoid the temptation of attaching too much significance to what the commission has said and to stop reading between the lines for language designed to place the entire producing industry in the same strait jacket of rigid regulation in which the so-called old-line utilities find themselves.

"The fact of the matter," said Connole, "is that in the present state of the law the commission had no choice but to rule as it did in view of the plain language of the District of Columbia circuit court's decision in the Panhandle case. Even one who

disagrees most strenuously with the wisdom of the court's determination could not, in my opinion, misunderstand what it said. There simply was no other place for the commission to go once the court had spoken and the United States Supreme Court had twice refused to review it."

CONNOLE said he is convinced that unless some means are devised to measure the length and breadth of what constitutes justness and reasonableness of producer prices, "the whole business of natural gas regulation might as well be abandoned." He explained:

> . . . I think it is common knowledge that virtually every pipeline rate increase filed with the commission in recent years has been prompted by increases in field prices for natural gas. With the constitutional guaranty that such costs be recovered in full, if they are reasonable and within the power of the company to charge, the regulatory body, whether concerned with the pipeline or the distributor, has no choice but to pass that increase along. If meaningful regulation is to continue, some method must be found for determining whether these increases are just and reasonable. With pipeline prices already touching the ceilings in some fuel competitive areas, this is not an academic exercise. It is stubborn economic fact. As the commission majority stated in the Union case, our responsibility "is to find whether, as a result of these bargaining processes, the parties have fixed upon a rate which, in addition to protecting their private interests, is in the public interest." "Arm's-length bargaining," said the commission, "is not proof of reasonableness."

Connole believes the idea is now gaining general recognition that revenue requirements, however measured, must form the fundamental basis on which any objective standard of justness and reasonableness would be measured. Stressing the term "fundamental basis," he said that in his judgment this means that revenue requirements need not be determined for each individual sale from each individual wellhead, field-gathering point, gasoline plant, tail gate, or other point of sale. It means that revenue requirements "should be used when setting out touchstones against which to determine the principles to measure the reasonableness of these particular sales. In other words, the starting point ought not to be how much can the gas bring. Rather it should be, how much does the industry need to compensate it adequately and to assure the continuation of exploration and development."

ALTHOUGH producers may not be aware of it, Connole said there are advantages both to the industry and to the public in a continuation of producer regulation. First of all, he said, the industry is accorded a maturity, a stability, a recognition that it does not have when not regulated and exposed to destructive economic forces. Investors are given greater confidence and the industry enjoys a greater facility in attracting capital for expansion. The constitutional opportunity of earning a fair return carries the company a long way toward resolving uncertainties now found in the minds of potential gas and oil investors.

Another advantage, said Connole, lies in the fact that a regulated natural gas producer files a schedule of rates and charges, relieving him of much of the need now present to anticipate events of the next twenty years. "The terms of contracts that are filed as rate schedules are subject to increases and decreases as

conditions change," he explained. "This is as true of producing properties since the Mobile decision as it was before. There is now nothing to prevent producer and pipeline agreement to the filing of needed increases should events justify such action."

Connole complained of the unfair and misleading interpretation of the commission's activities since the Phillips case. Noting statements accusing the commission of being unable or unwilling to make up its mind with respect to fixing prices for natural gas produced by independent producers, the commissioner stated as follows:

> . . . Actually, of course, the commission has no resonsibility to dictate the principles which the industry will pursue in demonstrating justness and reasonableness. Critics of the commission imply that there is dereliction of duty in the time lags occurring inevitably with the commission's efforts to solve the regulatory problem. A fairer statement would be that the industry has not determined on a method which will satisfactorily show reasonableness. After all, the first responsibility lies with the companies. The commission is merely an agency before whose bench appear interested producers attempting to demonstrate as best they can the strength of their positions.

CONNOLE reminded the analysts that the FPC, unlike some governmental agencies, does not affirmatively propose or execute any plan. "We are not social planners," he said; "we do not dictate to the industries; we do not regulate how they may try their cases. We do not even set out the standards which the companies must meet. All that the Federal Power Commission can legally do is receive the best arguments made by litigants who have access to the same statutes, court decisions, and other principles of economics and law as the commission does, and then proceed to determine whether these arguments are sound."

He continued:

> Certainly it is incongruous for an industry such as the oil and gas industry—a lusty, youthful industry which needs no governmental hand holding—to complain of the absence of governmental direction. I suggest that, had the Federal Power Commission affirmatively promulgated a code or a standard by which natural gas producers were to fix their rates and prove their cases before the commission, the first to complain would be the affected parties. And quite properly so, for this commission could not have set up its own standards and then have sat in judgment on the wisdom and propriety of them. Good regulation does not contemplate usurping any prerogatives of management. I, personally, feel that as a Federal Power Commissioner I have neither the jurisdiction nor desire to dictate managerial decisions.

As for the prospects for new legislation in this Congress, Connole said it was no longer any secret that proposed legislation in one degree of completion or another is under active consideration by various industry groups. He warned, however, that unless these groups are able to achieve accord by the time a proposed bill is introduced, the chances of its passage through Congress are slight. On the other hand, he said, legislation supported concertedly by the producing segments, the pipelines, the distributors, and the consumer interest should stand an excellent chance of enactment.

The March of Events

TVA Needs New Capital

THE Tennessee Valley Authority told the President and Congress early this month it must get new sources of capital if it is to meet expanding power needs. The government power agency, in a year-end report, declared its revenues will provide only a part of the money needed to pay for expansion after the winter of 1959-60.

The report warned that TVA's margin of capacity overload is already "too small" and threatens to disappear entirely after 1960.

"TVA must have access to other sources of funds if power to nourish the present rapid growth (in the Tennessee valley) is to be provided," the report stated.

This was reported to mean that TVA wants more money from Congress or the authority to sell revenue bonds to finance new power construction. President Eisenhower in 1956 asked Congress to allow TVA to sell bonds to help pay for expansion, but the lawmakers failed to approve the proposal.

Offer 20-year Plan for Northwest

THE Northwest Public Power Association recently recommended to President Eisenhower a 20-year, multibillion-dollar combination power and flood-control project for the Columbia river basin. The project would bring total power production to 21.5 million kilowatts for the Pacific Northwest and impound 47 million acre-feet of water which could be used in part both for flood control and for leveling out present seasonal fluctuations in power production.

Gus Norwood, NPPA executive secretary, said a proposal for construction of 10 federal dams forms the foundation of the organization's recommendations. These 10 dams would cost an estimated $2.5 billion, would add 9 million kilowatts of power to the Northwest pool, and would provide 22 million acre-feet of flood-control storage in the Columbia basin. The association also called for creation by Congress of a regional power agency to finance the program through the issuance of electric revenue bonds.

Colorado

Asks Gas Rate Rise

COLORADO INTERSTATE GAS COMPANY, Colorado Springs, last month filed a proposed $3,136,700 wholesale natural gas rate increase with the Federal Power Commission. The company proposed to make the higher rates effective February

1st. The increases would affect 12 of Colorado Interstate's 13 wholesale customers in New Mexico, Colorado, and Wyoming.

The new rates reflect increases in the cost of purchased gas and spending for transmission and production facilities, the company said. It also wishes to raise its rate of return on investment to 6¾ per cent from 6½ per cent.

The proposed increase would be in addition to a $10.3 million rate increase which the company has been collecting, subject to refund, since February, 1955. That increase is now under study by the FPC.

Indiana

Utility Wins Tax Controversy

A 3-to-2 opinion handed down by the state supreme court last month held that a Lake county power company need not pay Indiana's gross income tax on electricity supplied to an Illinois firm. The majority opinion held the sale of Indiana-produced power for use in Illinois was interstate commerce and not subject to the state tax. Imposition of the Indiana tax on the transaction would be an "unconstitutional burden on commerce among the states," the opinion said.

The ruling affirmed a decision by Judge Felix A. Kaul of the Lake circuit court in a case involving the Chicago District Electric Generating Company. Its plant is in Hammond near the state line. The utility produces electrical power which it sells to Commonwealth Edison Company for use in Illinois and to the Northern Indiana Public Service Company for use in Indiana.

The state's gross income tax is paid on the power sold to the Indiana company.

Maryland

Gas Company Liable for Tunnel Work

THE Baltimore Gas & Electric Company is liable for the $2 million cost of removing and relocating certain of its facilities in connection with the construction of the Patapsco Harbor tunnel, Judge Joseph R. Byrnes ruled last month in Baltimore city court. Judge Byrnes handed down an 18-page opinion in connection with litigation filed by the State Roads Commission over the disputed cost item.

He noted that the facilities in question already have been moved and relocated, that a careful record of the cost was kept, and that the cost was paid by the commission, subject to a reimbursement if the court ruled in its favor.

The company took the position that rights it acquired upon the installation of facilities, pursuant to its franchise, were private property which could not be disturbed without condemnation and just compensation.

Michigan

Gas Refund Earmarked

THE state public service commission recently earmarked $3,808,975 as a refund to customers of Michigan Consolidated Gas Company and ordered it invested in U. S. Treasury bills until the refund can be made.

The commission's action would set aside a total of $6,253,523 to enable the company to avoid federal income taxes of nearly $2 million if the sum remained designated as revenue.

In a similar action, the commission allocated $7,232,650 as a refund to customers of Consumers Power Company and the Michigan Gas Storage Company.

The companies received the refund money two years ago when the Federal Power Commission reduced rates on wholesale gas sold by their principal supplier, Panhandle Eastern Pipe Line.

New York

Votes Sale of Seaway Power

THE New York State Power Authority last month approved a contract to sell St. Lawrence river power to the Reynolds Metals Company. Also approved was a contract to sell electricity to the Niagara Mohawk Power Corporation of Syracuse, New York. The action was subject to approval by Governor Averell Harriman.

Significance was attached to the fact that former Governor Charles Poletti and Thorne Hills, the two Harriman appointees on the authority, voted against both contracts.

Oregon

Dam Work by PUD Hit

U. S. SENATOR Richard L. Neuberger (Democrat, Oregon) said recently he had the same "fundamental objection" to partnership construction of the John Day dam by the Klickitat county PUD as by a syndicate of three private utility firms. Neuberger said higher rates for industrial use of energy will result from partnership construction than from federal construction.

He said the fact the federal government can borrow money at lower interest rates and that new, higher-cost dams can have their power pooled with cheap Grand Coulee and Bonneville power rates made federal development cheaper.

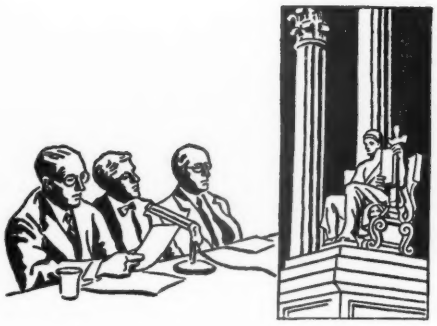
Wisconsin

Told Rate Refund Goes to Consumer

THE state public service commission last month notified eight Wisconsin utilities purchasing natural gas from the Michigan Wisconsin Pipe Line Company that any refunds received from the company in connection with a rate increase must be passed on to consumers. The pipeline company increased its "city gate" rate November 15, 1956, in accordance with a Federal Power Commission order.

The rate will be in effect until the FPC takes final action to determine whether it will remain in effect or be lowered. The commission estimated the increase would cost customers of the eight utilities $1,450,000 annually.

The Wisconsin utilities which purchase natural gas from the pipeline company are the Milwaukee Gas Light Company and the Wisconsin Public Service Corporation, Milwaukee; the Wisconsin Power & Light Company and Madison Gas & Electric Company, Madison; Wisconsin Fuel & Light Company, Manitowoc; the Stoughton Light & Fuel Company, Stoughton; Wisconsin Natural Gas Company, Kenosha; and Wisconsin-Michigan Power Company, Appleton.



Progress of Regulation

Trends and Topics

Rate of Return When Interest Rates Rise

TIGHT money, driving interest rates higher than they have been for many years, may be expected to play a part in future rate proceedings. Prevailing economic conditions and discernible trends for the future are recognized by courts and commissions as factors affecting the return allowance. A fair rate of return during recent years, when interest rates were low, might not be a fair rate of return when interest rates are high. A return allowance of 8 per cent was not uncommon before the depression which started in 1929, but during recent years allowances have been around 6 per cent.

Returns in Predepression Era

A federal court in 1929 decided that an 8 per cent rate of return was reasonable for an electric company (PUR1929B 1). The California commission in 1922 called a return of 7 per cent wholly inadequate for an electric company (PUR1922D 595). The Virginia commission in 1922 thought a return allowance of 9 per cent for a gas utility was ample but not excessive (PUR1922B 737). A return of 8 per cent was approved by the New York commission for a telephone company in 1920 (PUR1921A 385).

The Supreme Court, in the Southwestern Bell Telephone Company case, held that a return of 5½ per cent was wholly inadequate, considering the prevailing interest rates (PUR1923C 193). A federal court condemned a departure from the custom of allowing a return of 8 per cent in a case involving the New York Telephone Company (PUR1925A 491).

The New Jersey supreme court in 1920 discussed the variations in interest rates and other costs, noting among other things that in the year 1919 the rate of interest had increased so that on securities of undoubted value, such as United States Government bonds, the rate of interest instead of being 3 per cent, or perhaps less, had gone up to the neighborhood of 6 per cent. Obviously, said the court, in such a situation an 8 per cent return in an active business in which the risks and hazards had been increased was much less

than a rate of 8 per cent in 1913 when a previous rate case had been decided (PUR1920F 1001, 1003).

Downward Trend of Interest and Return

In contrast to those allowances, we have witnessed general approval, in recent years, of allowances around 6 per cent, as in the New York Telephone Company case (5 PUR3d 33), when the commission in 1954 expressed the opinion that a return slightly above or below 6 per cent would be fair. It may also be noted that recently, as in the New York case, the rate of return is often applied to original cost rather than a higher fair value.

The California commission in 1935 referred to the varying rates of return during different periods. A rate of return approximating 8 per cent was said to be common seven or eight years previously. Gradually a lower figure had developed. A return of 7 per cent had been found reasonable in 1929, and when the commission, in November, 1933, had fixed rates calculated to yield approximately 6⅔ per cent, a court (4 PUR NS 260) had enjoined enforcement of the rate order because it was doubtful that the return was sufficient. Three weeks later the Supreme Court, in the Dayton Power & Light Company case (3 PUR NS 279), had held that a return of 6½ per cent was adequate for a natural gas distributing company. The California commission observed that there had been a general lowering in interest rates, and capital no longer commanded and enjoyed the return it had a few years before (7 PUR NS 443).

The same commission in 1936 said that it was compelled to recognize the great changes occurring during the period of depression through which the nation had been passing. The commission could not fail to observe the sharp decline which had occurred in the cost of capital funds to public utilities (14 PUR NS 252, 278).

Present-day Conditions Govern Return

The Supreme Court, in the West case (PUR1930A 225), said that what is a fair return cannot be settled by invoking decisions made years ago based upon conditions radically different from those prevailing at the time the question is presented to the court. The problem is one to be tested primarily by present-day conditions. The Supreme Court recognized changes, in the West Ohio Gas Company case (6 PUR NS 449), when it held that a return was too low when applied to a corporation engaged in the sale of gas during the years 1928 to 1931, two at least of the four years being "before the days of the depression."

A rate of return, as noted by the Maryland commission in a case involving the Chesapeake & Potomac Telephone Company (93 PUR NS 215), may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally. It was also noted by the Michigan commission, in a telephone rate proceeding (10 PUR NS 149, 207), that a reasonable return allowance varies

with such changes. Increases in the cost of capital must be recognized.

The Florida commission, in a rate proceeding in 1953, observed that the cost of capital had steadily increased. Interest rates in that year were considerably higher, and the commission said that a return of only 6 per cent would be inadequate for a company facing an expansion program which must be financed by the issuance and sale of large amounts of bonds and stocks. The commission finally concluded that a rate of return somewhat in excess of 6 per cent, but less than 6½ per cent, would be reasonable for an electric company (99 PUR NS 129). Similarly, the West Virginia commission, in allowing a return of 6¼ per cent for a natural gas company in 1953, said that it recognized the fact that there had been some increase in the cost of money within the past year (1 PUR3d 373).

Many problems will arise during the period of higher capital costs which appears to confront us. Historical costs as applied to outstanding securities and prospective costs applicable to new money which the utilities must raise in order to finance expansion programs must be considered. The claims of public utility stockholders to share, like other investors, in increased profits will undoubtedly be pressed. Commissions have never linked the rate of return directly to interest rates, but they have recognized the relationship of rate of return to the rise and fall of interest rates and the rise and fall in cost of equity capital.

Review of Current Cases

Rehearing Denied on Question of Contract Abrogation By Unilateral Rate Filings

THE Federal Power Commission refused to grant a rehearing on its recent opinion relating to a question of contract abrogation by unilateral filing of rate increases (15 PUR3d 216). (The original decision was reviewed in the November 22nd issue of the FORTNIGHTLY, at page 872.)

Tyler Gas Service Company and the city of Tyler, Texas, contended in the original proceeding that United Gas Pipe Line Company had attempted to change contract price provisions by unilateral filing of rate increases. In that proceeding the commission ruled that a conversion tariff filed without objection by the distributing company or the city, even though the rates were thereby increased, became the legal rates and the contract rates ceased to exist. Therefore, later unilateral rate filings by the pipeline company were in no way an abrogation of the former contract.

The change proposed, said the commission, was in another section of the tariff—the rate schedule.

This issue, again presented on petition to rehear, was rejected for lack of new evidence or principles of law requiring modification of the original decision. Similarly, the commission reaffirmed its position on the motion for refunds, made in the earlier proceeding, which hinged upon the alleged invalidity of the conversion tariff. The asserted grounds for the refunds having been adversely decided in

a judicial decision denying injunctive relief, the commission said it was barred from action on the motion. A contention that the commission did not in fact pass on the reasonableness of the level of rate increases over the contract prices was also rejected.

Finally, the city of Tyler attempted to assert a contract with United for delivery of gas to the distributing company at the rates specified in the contract in effect prior to the conversion tariff filing. The commission indicated that even if such a contract had been made, it would not be enforceable by the commission. The only legal rate, it said, is the filed rate. *Re United Gas Pipe Line Co. Docket Nos. G-1142 et al. November 23, 1956.*

Commission Adjusts Gas Company's Merchandising And Depreciation Reserve Allocations

A PRESENT return of 6.365 per cent was considered sufficient, by the Wyoming commission, to enable a natural gas company to attract capital needed for improvements and adequately service consumers in a certain division. A request for increased rates was denied. An allowance for materials and supplies and cash working capital was included in the net investment rate base, although the commission noted a difference of opinion among various jurisdictions as to the propriety thereof.

Merchandising and Jobbing Allocations

The commission reiterated a previous holding that the merchandising and jobbing operations of a natural gas company, regardless of the load-building aspects, should not be considered part of the utility business for rate-making purposes. No jurisdiction over such collateral activities existed. Operating expense chargeable thereto should be excluded from income statements in a rate proceeding.

Depreciation Reserve

Depreciation, pointed out the commission, is the loss of capital assets which a utility annually sustains due to all of the various factors contributing to and causing the ultimate retirement of plant facilities. In the words of the commission, it was "a hole in the utility's assets," representing reduction in the service or economic life of properties; *i.e.*, the extent of the impairment of capital investment or the amount of the consumption of capital assets over any fixed service period.

If the company had properly accrued depreciation on natural gas properties on a company-wide basis, the amount of overall depreciation reserve should at any given time accurately represent the actual depreciation of the properties then existing. Consumers in the division, the commission thought, had paid their proportionate share of total depreciation reserve and were entitled to have the properties comprising the division depreciated in the same manner as the company had depreciated all of its gas properties.

Consumer Contributions towards Reserve

If the amount of the allocated reserve was smaller than the total amount of their annual contributions towards the reserve, then they had, in fact, contributed capital to the company to the extent of the difference. Manifestly, it would have been unfair if the commission approved an allocated depreciation reserve smaller than their total contributions to the company-wide reserve. This would have allowed

the company to earn a return on capital or property in effect contributed by consumers rather than stockholders. Such a procedure would make the consumer an unwilling investor without any proprietary interest in the utility. *Re Montana-Dakota Utilities Co. Docket No. 9308, December 7, 1956.*

Dial Rates Fixed on Current Exchange Group Basis

UPON converting an exchange to dial service, a telephone company obtained authority from the North Carolina commission to increase rates for the exchange in keeping with the rates applicable to its other exchanges having a comparable number of subscribers.

Calling attention to exchange groups established in a general rate adjustment in 1954, the company contended that the newly converted exchange should be classified in a still higher rate group. Actually, since 1954 the company's exchanges had grown in number of subscribers so that there remained little consistency with respect to rates being charged under the groupings as then established. While the company recognized the rate consistency difficulty, it maintained, nevertheless, that any inconsistencies should be removed only if and when another investigation is made of the entire rate structure. The commission disagreed, however, and fixed the new dial rates for the exchange on the basis of other currently comparable exchanges.

Also authorized was the elimination of free toll service from the new dial exchange to a neighboring town. Regular toll charges were ordered. The free service, it appeared, had originally been instituted years ago to encourage the addition of new subscribers. The commission found that the practice now resulted in a preference to subscribers of the one exchange. *Re Central Teleph. Co., Inc. Docket No. P-10, Sub 59, November 26, 1956.*

System-wide Refund Ordered upon Remand of Rate Case

THE Pennsylvania commission ordered the Pennsylvania Power & Light Company to make a system-wide refund of $6,320,736 for alleged overcharges and interest covering a period of about two and one-half years. On July 30, 1952, the commission had allowed a proposed rate increase.

On appeal the Pennsylvania superior court disapproved and remanded that action in so far as it had allowed annual amortization of plant acquisition adjustments as an operating expense (7 PUR3d 609). Following the mandate of the court the commission has found that the company's allowable operating revenues are less than those found in its original order. This is the basis for the refund.

Reparation Period

Most of the rates approved by the first order became effective August 12, 1952. All of these rates remained in effect until February 28, 1955. Some customers claimed that the proper reparation period is from November 8, 1949, to February 28, 1955. The date of November 8, 1949, marks the beginning of two years immediately preceding the institution of the commission investigation which resulted in the rate increase.

The commission disagreed with these customers, holding that the earliest date

for commencement of refund liability would be August 12, 1952, the effective date of the order, on the basis that an order fixing rates is binding only in so far as it is lawful. It held that the statutory provision that the commission shall have the power to require a public utility to refund any excess paid by any patrons, in consequence of such unlawful collection, within two years prior to the date of the filing of the complaint has no application to the instant proceeding. This provision applies only to complaints against existing rates. It does not apply to proposed rates.

Restricted Earned Surplus

The commission included as an allowable operating expense amounts representing deferred federal income taxes (not actually paid in the refund periods) related to accelerated amortization of war emergency facilities. As the company charges itself on its books with such deferred income tax, it credits "restricted earned surplus." This surplus will continue to increase until some time in the future when income taxes will be increased above the normal charges. This restricted earned surplus will be used then for such purposes.

Fair Value

The original order of July 30, 1952, was based upon the level of operations at October 31, 1951. The company stated that during the period from the end of July, 1952, to the end of February, 1955, there were some very significant changes in revenues, expenses, property, and conditions of service. Consequently it submitted measures of value at July 31, 1952, December 31, 1952, December 31, 1953, December 31, 1954, and February 28, 1955. Measures of value as of these dates were considered by the commission.

The commission considered, among other things, original cost and reproduction cost (or trended original cost), the latter at fair average price of materials, property, and labor. It also recognized the company as a going concern.

Return Allowance

Although the commission had made no specific finding with regard to the allowable rate of return, it had concluded that a rate of 5.82 per cent was not excessive. It observed that since any refund liability which may be held to exist under the circumstances of this remand proceeding must be measured by the excess charged over reasonable rates during the period the contested rates were in effect, a finding must be made of the fair rate of return for the remand period on the basis of capital market experience during that period.

Evidence in the remand proceedings indicated that there had been a gradual downward trend in the cost of money. In view of this fact, the fair rate of return for the purposes of the remand proceedings was found to be 5.76 per cent. *Pennsylvania Pub. Utility Commission et al. v. Pennsylvania Power & Light Co. C. 15559 et al. November 20, 1956.*

Reasonableness and Construction of Tariffs Questions for Commission

THE United States Supreme Court, reversing a court of claims, ruled that the question of tariff construction, as well as that of the reasonableness of the tariff

as applied, fell within the primary jurisdiction of the Interstate Commerce Commission. The proceeding was brought by railroads to recover from the United States transportation charges under an incendiary bomb rate for carrying napalm-filled bomb casings without bursters or fuses.

The government contended that the high incendiary bomb rate was inapplicable because the absence of bursters and fuses deprived the napalm cases of the characteristics of incendiary bombs. It was argued that, if the incendiary rate was held to govern, the tariff would be unreasonable as applied to the napalm shipments, and that this issue should be referred to the Interstate Commerce Commission.

The court of claims gave summary judgment for the railroads.

Primary Administrative Jurisdiction

Whether the incendiary bomb rate should apply in this case, the Supreme Court declared, is a question within the expert competence of the commission. Courts must not only refrain from making tariffs, it was said, but under certain circumstances must decline to construe them as well. Where the question is simply one of construction, the courts may pass on it as an issue solely of law. But where the inquiry is essentially one of fact and of discretion in technical matters, then the issue of tariff application must first go to the commission. Recognition of the commission's primary jurisdiction over such issues, the court pointed out, conduces to uniformity and consistency in the regulation of business entrusted to the agency. It also results in a more rational exercise of the limited functions of judicial review.

Plainly the question of reasonableness of a tariff rate is one for the commission to determine because of the involvment of cost factors and other considerations requiring expert appraisal. The court observed that in this case the same factors would be determinative of both the question of reasonableness and the closely related issue of construction.

Estoppel and Period of Limitation

The government asserted a defense of estoppel against two of the railroads because of a ruling by a railroad tariff agency, to which the two railroads belonged, that a lower rate should apply to napalm shipments. The court held that summary judgment for the railroads on this issue was error, and that the question whether the agency could bind the railroads presented issues of fact which must be tried.

The Supreme Court also ruled that the 2-year period of limitation contained in § 16 (3) of the Interstate Commerce Act did not bar the government from referring issues to the commission after two years, under the primary jurisdiction doctrine. It was noted, too, that while the section limits carriers generally to two years in bringing suits to recover transportation charges, it does not apply to suits against the government. The Court of Claims Act allowing six years applies to such suits. *United States v. Western Pacific R. Co. et al. 77 S Ct —.*

Imprudent Expenditures Result in Denial Of Rate Increase

POINTING to excess investment and unnecessary expenses, the Louisiana commission denied a request by a small telephone company for a rate increase. With-

out actually calculating a rate base, the commission expressed the opinion that substantial net revenues could be obtained with prudent management.

Excess Investment

Apparently anticipating relatively heavy demand for telephone service, the company, a Rural Electrification Administration borrower, had constructed enough plant to serve almost twice the number of its existing customers. This resulted in a cost per telephone considerably higher than that of other companies in the state similarly using federal funds. The commission was convinced that either the applicant's plant was grossly overbuilt, or that its funds had not been prudently invested.

In any event the commission declined to allow the present subscribers to be saddled with the excess investment.

Operating Revenue Deductions

Depreciation charges of 4.5 per cent on over-all plant were claimed. Although that figure would probably be acceptable for income tax purposes, the commission rejected it for rate-making purposes, considering particularly that the plant was new and modern, and that it was designed for long-term service with little chance of early obsolescence.

Executive salaries amounted to nearly 24 per cent of the gross operating revenue. Other comparable companies chosen at random showed charges for executive salaries of 7.73 per cent of gross revenue in one case and 4.61 per cent in another.

A substantial rental payment to the president and principal stockholder for the use of property upon which to store poles was disapproved since the company had ample space for storage requirements. The payment of large salaries and rents to the principal stockholder cannot be approved, said the commission, when such amounts exceed one-quarter of the gross revenue of the company.

The commission cited as a prime example of imprudent expenditures two luxurious company automobiles fitted out with air conditioning and accessory power equipment for the use of the president and his wife.

Regulation, said the commission, is not designed to permit regulated companies to operate on a "cost-plus" basis. Nor does regulation insure that the business shall produce net revenues. "The obligation of regulatory commissions is not to guarantee a fair return, but is to prescribe rates that, *with prudent and efficient management,* would permit the utility to earn a fair *return on the funds prudently invested.*" *Ex Parte Reserve Teleph. Co. No. 7030, August 29, 1956.*

Extraterritorial Service by City Utility Subject to Commission Jurisdiction

ON a question of commission jurisdiction over rates and service by a municipality outside its corporate limits, a Kentucky court of appeals sustained the administrative jurisdiction. By statute the commission has no authority over a public utility or service facility which is owned, controlled, operated, or managed by a city. The controversy here was how far the exemption went in relation to nonresident patrons.

The city of Richmond, Kentucky, furnished gas and water service to individual consumers outside the corporate limits.

Outside distribution lines were owned by the nonresident consumers themselves, and individual meters were used.

When the city increased nonresident rates by one-third over resident rates, the nonresidents complained to the commission, asking that it fix reasonable rates. Finding that the city did not operate the facilities beyond its corporate limits, the commission ruled that it had no jurisdiction and dismissed the complaint.

In earlier decisions the court had construed the applicable statute as not exempting a city from regulation by the commission as to extraterritorial operations.

The city attacked the soundness of these decisions and asserted that in any event Richmond sold and delivered the commodities within its boundary.

The court recognized that the city released the commodities through valves located within its boundary into the private lines to the nonresident consumers. But the city furnished the motive power to convey the commodities through the lines and measured the quantities at the individual meters. It was not a wholesale disposal or distribution of gas and water to the suburbs or to groups of consumers as unified communities. The location of the meter was the point of consumption, observed the court, for it was there that the commodities were taken from the mass and measured and consumed.

Under the earlier decisions, therefore, the extraterritorial service was not exempted from regulation by the commission, and the ordinances fixing the increased rates were void. Power to fix such rates resided exclusively in the commission. *City of Richmond et al. v. Kentucky Pub. Service Commission, 294 SW2d 513.*

Court Clarifies Administrative Subpoena Power

A PROCEEDING to enforce administrative subpoenas *duces tecum* issued by the Civil Aeronautics Board brought forth a clarification of the board's power to issue and the court's power to enforce. The United States court of appeals held that the inspection of documents sought under the supervision of the court was proper and that the court should determine whether the individual documents in possession of persons to whom the subpoena had been directed had been sufficiently described, whether they were material and relevant, whether the demand was oppressive and unreasonable, and whether the privacy of third persons had been invaded.

The Civil Aeronautics Board, held the court, should call individuals and take testimony as to the existence and custody of the documents sought, and should seek in advance to determine whether they are material and relevant to the issues before the board in order to avoid being arbitrary and oppressive. In issuing the subpoenas, the board should not designate all documents in a particular class, but only those which the board has found by preliminary inspection to be in the possession or under control of the persons to whom the subpoenas were directed and to be relevant and material to the issue.

Enforcement of Subpoenas

In an enforcement proceeding, the issue as to whether each of the documents subpoenaed is relevant and material is a judicial question which must be passed upon by the court. There are no presumptions that the administrative agency or hearing officer has subpoenaed only

those documents which are relevant and material.

No Rubber-stamp Approval

The district court, in merely comparing the subpoenas and charges in the complaint, had failed to pass upon the judicial question presented as to whether the documents sought were relevant or material to the proceeding. The lower court need not require as comprehensive a showing of materiality and relevancy of documents sought from entities and individuals directly under control of the board as would be required in the case of documents sought from private parties. However, the court should not give merely rubber-stamp approval. To do so would, in effect, vest final authority to determine the materiality and relevancy of the documents in the Civil Aeronautics Board. *Hermann et al. v. Civil Aeronautics Board, 237 F2d 359.*

Related Telephone Companies Merge To Effect Economies

THE Wisconsin commission authorized the General Telephone Company of Wisconsin to merge with two affiliates, Community Telephone Company and St. Croix Valley Telephone Company, and to issue common stock and first mortgage bonds to finance the merger, retire short-term notes of the constituent companies, and pay for net additions to plant in service.

The controlling interest in the outstanding common stocks of the three companies is owned by the General Telephone Company. The transactions involving the acquisition of securities and the merger were claimed to be at cost to the parent company.

Resulting Capitalization

The existing ratio of the petitioning company is 31.8 per cent common stock at par, 37.9 per cent total common stock equity, 18.8 per cent preferred stock, and 43.3 per cent long-term debt. The ratio of long-term debt to net plant is 37.3 per cent.

After the merger the proposed ratio would be 32.2 per cent common stock at par, 37.1 per cent total common stock equity, 14.7 per cent preferred stock, and 48.2 per cent long-term debt. The commission noted that the proposed financing would result in a slight betterment in the ratio of the par value of common stock outstanding, about the same ratio of total common equity, and a reasonable debt ratio.

Operating Economies

The commission found that the various transactions involved in the merger were reasonable and consistent with the public interest.

Since the holding company acquired control of the three companies, they have been operated by petitioning company in the interest of economy, using its offices, facilities, and personnel for many of their activities. Certain additional economies could be effected by the elimination of separate corporate entities and the resulting necessity for separate stockholders' and directors' meetings and the maintenance of separate records and reports. *Re General Teleph. Co. 2-SB-664, November 15, 1956.*

Commission Limits Power Franchise to Avoid Duplication of Plant

IN authorizing Niagara Mohawk Power Corporation to exercise a transmission franchise renewed by the village of Lancaster, New York, the New York commission imposed a restriction upon the distributing rights of the company under the franchise. The franchise itself limited distribution to customers who would take 100 horsepower or more. Actually, Niagara Mohawk served only two customers in the village, each with 25-cycle power.

New York State Electric & Gas Corporation, serving several thousand customers in Lancaster, objected to the franchise as granted, on the ground that it would enable Niagara Mohawk to raid its customers. It was argued that the franchise should be further restricted to limit distribution to existing customers only. New York State Electric's facilities were adequate to serve the town, and if Niagara Mohawk should decide to serve additional customers, it would be obliged either to construct new facilities or purchase 60-cycle power from New York State Electric under a power pool agreement subsisting between the companies.

While Niagara Mohawk had never sought to raid the other company's customers, nevertheless it would be obligated to honor any requests for service in the franchise area. Hence, the commission observed, irrespective of the company's policy, or whether such service would be economical, unlimited approval of the franchise might produce a situation which would be disadvantageous to both companies. Unnecessary duplication of facilities increases the cost of service to consumers and should not be encouraged.

The commission thought that, since Niagara Mohawk already had a plant in Lancaster, it should not be limited to serving existing customers. On the other hand, it ought not duplicate existing plant of New York State Electric. The commission concluded that the franchise should be limited to allow distribution to those customers only who could be served directly from the existing lines of Niagara Mohawk. *Re Niagara Mohawk Power Corp. Case 18077, December 3, 1956.*

Commission's Revocation of Certificate Held Invasion Of Court's Appellate Powers

THE Arizona supreme court agreed with a common carrier that, where an appeal had already been perfected from a lower court's summary judgment directing the commission to cancel a common carrier's certificate of public convenience and necessity, the commission's revocation of the certificate was a direct and plain invasion of the appellate and revisory powers of the court. The commission's order would not aid the appeal; rather, it would tend to nullify it. The jurisdiction of the court, when properly invoked, had to be protected. It could not be defeated or usurped to the extent that when its decision was rendered, it would be nugatory.

Certiorari Proper Remedy

The common carrier was held to have properly applied for certiorari to test the commission's order canceling its certificate. No plain, speedy, and adequate remedy at law was available to the carrier.

No direct appeal would lie from the commission's order, and it would create

an anomalous situation to force the carrier to commence a circuitous new action to void the commission's order if in fact the commission had acted without jurisdiction. Certiorari was the only appropriate remedy to test the exercise of jurisdiction by the commission in entering the order in question.

The carrier's right to apply for certiorari had not been defeated by the commission's failure to appeal from the summary judgment since the carrier had been permitted to intervene in the action and had appealed from the summary judgment as a party aggrieved.

The giving of notice of appeal had operated automatically to grant a stay pending determination of the appeal, it was held. A supersedeas bond was not required in order to procure a stay. *Whitfield Transp., Inc. v. Brooks et al. 302 P2d 526.*

Commission May Move Base of Operations In Granting Transfer of Certificate

THE Georgia supreme court upheld the authority of the state commission to grant a transfer of a motor carrier certificate operative "between all points in Georgia" from its owner who operated only one truck based in Calhoun, Georgia, to a company with eleven trucks serving the Atlanta area. The commission limited the certificate to operations in Atlanta and a surrounding 20-mile territory. Protesting parties contended that the commission could not grant the transfer, on the ground that it involved a change in the base of operations.

A Georgia statute authorizes the commission to alter, amend, and transfer motor carrier certificates. The court ruled that under this statute there was no merit in the contention that the commission could not transplant the one-truck operation in Calhoun to an 11-truck operation in Atlanta. A statute provision enumerating pertinent matters for the commission to consider in passing upon a certificate proposal was held to be advisory only, so that irrespective of what the evidence might be upon the matters mentioned in the provision, the commission's authority was not thereby affected. *Woodside Transfer & Storage Co. et al. v. Georgia Pub. Service Commission et al. 94 SE2d 706.*

Telephone Boundary Lines Not Unreasonable

THE Missouri commission dismissed a complaint which had been brought by residents of a certain area in an attempt to have the boundary lines of two telephone companies changed. Once the respective companies' service area maps had been approved, pointed out the commission, they were binding on the commission, the companies, and the area residents, unless found to be unreasonable.

Boundary lines of telephone service areas had to be fixed at definite locations. It was inevitable that certain persons would be served by a particular exchange and their neighbors by another. This alone, however, did not result in undue preference for, or discrimination against, any person. Unless exceptional circumstances were shown, one company would not be permitted or required to invade the service area of another.

There had been no showing of arbi-

trariness or unreasonableness, nor of exceptional circumstances. The commission noted that, if it would have approved the proposed change, the financial health and vitality of the telephone company in the smaller town might have been jeopardized to the detriment of the public generally.

Same Rule with Different Result in Other Case

A similar complaint in another case before the commission resulted in the application of the same rules. In that instance, however, the commission found that the present boundaries were arbitrary and unreasonable to the extent that a small uncertificated area, in which fifty-two of the applicants lived, lay between the two exchanges. No adequate explanation had been given for the existence of the uncertificated area. The company had expressed a willingness to extend service into the uncertificated area, albeit on unattractive terms.

The commission ordered that the area be either certificated as a part of one of the exchanges, or split between the two, depending upon the result of further studies. *Re Stone et al. Case No. 13,429, November 26, 1956; Findley et al. v. A & M Teleph. Co. et al. Case No. 13,464, November 26, 1956.*

Commutation Fare Increase Permitted

THE New York, New Haven & Hartford Railroad was authorized by the Massachusetts commission to increase commutation fares on two lines 22½ per cent. The company had requested a 25 per cent increase, on the basis of a projected one per cent decline in passengers due to the increase.

In comparison with other railroads, the commission commented, the company was unique by virtue of the high proportion of passenger revenues to total revenues. In 1955, the proportion was 40.4 per cent. Passenger train miles represented 74 per cent of the total train miles operated during that year. The company had claimed an increasing annual deficit in passenger service net operating income since 1946. During the same period, rate revenues had increased substantially, but the deficit in the passenger operation had continually absorbed a large portion of freight income, 71 per cent in 1955. Over the 10-year period, the company claimed it had averaged a 1.9 per cent return on its investment.

During the same period, the importance of commutation service to total passenger revenues had been increasing, representing in 1955 23.9 per cent of passenger revenue, 65.7 per cent of passengers carried, and 35.9 per cent of passenger miles traveled. The company presented indices of wage rates and material costs which showed an increase by 1955 of 79.8 per cent in the former and 43.7 per cent in the latter. The commission concluded that present fares were well below comparable fares on competitive carriers and that the increased fares, with minor exceptions, would still be below competitive rates.

An increase in commutation fares was warranted in order that the lines involved could be made to bear a fair share of operation costs relative to passenger service. The company, said the commission, was entitled to fares that would enable an honest and efficient management to provide adequate commuter service and to take steps designed to improve the service and thereby attract additional revenue. The approved fares would be consistent with

those approved by the Interstate Commerce Commission, as well as with fares approved by the New York and Connecticut commissions. *Re New York, N. H. & H. R. Co. DPU 11740, November 16, 1956.*

Railroad Commuter Fares Limited to Maximum Coach Fares Despite Losses

ALTHOUGH the Missouri Pacific Railroad Company showed that its loss from the operation of two commuter trains was completely out of proportion to the use being made of them, the Missouri commission refused to authorize higher rates than those applicable to one-way and round-trip coach fares.

Because the trains were used only during the commuter rush hours, and consequently produced revenues only during such limited periods of service, labor costs, which necessarily accrued for all intervening time, were unusually heavy. Other costs were similarly large. The increase actually allowed in this proceeding, while affording some additional revenue, would have only negligible effect on the return on investment.

Under a Missouri statute a common carrier is prohibited from collecting a greater or less compensation for any transportation service than it collects for rendering a like and contemporaneous service under substantially similar circumstances. A commutation fare is less than the normally applicable fare between the same points and is justified by reason of increased usage or other considerations not usually present in the case of normal coach fares. Such considerations include, for instance, the lack of baggage checking, no stopovers, and the limited time during which the fare may be used. These factors, the commission observed, indicate a service of less value than that afforded to purchasers of regular coach tickets. While some merit was recognized in the company's contention that certain commutation fares should be rounded out to end in "0" or "5" in order to facilitate the making of change in collection of fares on the train, the commission indicated that the benefit to be derived thereby would accrue as much to the company as to the commuter and would not be sufficient justification for the collection of commuter fares in excess of the established maximum coach fares. *Re Missouri P. R. Co. Case No. 13,442, December 10, 1956.*

Consideration or Nonconsideration of Past Violations Immaterial to Air Carrier Certificate Denial

THE United States court of appeals, in reviewing a Civil Aeronautics Board order denying an application for a certificate authorizing new or improved air-coach service between certain cities, affirmed the commission's finding that public convenience and necessity did not require the proposed service. The court thought it immaterial that, after stating its decision and reasons, the board had seen fit to add several comments to the effect that if the application had not been denied on the ground of public convenience and necessity, it would have been denied, moreover, on the ground of past violations.

Since such dictum did not affect the order, commented the court, it did not affect

the validity of the order. Public convenience and necessity did not require the services proposed, so the applicants could not receive the grant they applied for and could not be prejudiced by the board's discussing or not discussing either the applicant's past violations or the past violations of other applicants. *North American Airlines, Inc. et al. v. Civil Aeronautics Board, 237 F2d 209.*

Other Recent Rulings

Accelerated Depreciation Accounting. Clarifying a former order authorizing an accounting procedure for the tax results of accelerated depreciation (10 PUR3d 273, reviewed in the November 24, 1955, issue of the FORTNIGHTLY at page 910), the Florida commission declared that the procedure, which employs a restricted earned surplus account, is applicable to all public utilities electing to use accelerated depreciation except railroads and motor carriers. *Re Gulf Power Co. et al. Docket Nos. 4285-EU, 4302-EU, Order No. 2422, December 12, 1956.*

Shipper Witnesses Required. Granting only a part of the extended authority requested by a motor truck carrier, the Colorado commission again called attention to the necessity, in such a case, of proving by shipper witnesses a need for the proposed extended service, or that the service presently available is inadequate; the burden of proof is upon the applicant. *Burbridge (A. T.) Truck, Inc. Application No. 14754, Decision No. 46775, November 7, 1956.*

Return for Small Telephone Company. The Wisconsin commission authorized an increase in rates for a small telephone company after an increase in operators' wages to conform with the new state minimum wage regulations, where the rate of return would be 6.5 per cent on a net book value rate base. *Re Briggsville and Big Spring Teleph. Co. 2-U-4693, November 20, 1956.*

Return for Water Company. The New Jersey commission dismissed a complaint against rates of a water company where it appeared that there was an indicated rate of return of 5.2 per cent related to plant investment, which did not appear to be unreasonable. *Madison Park Civic Asso. v. Garden State Water Co. Docket No. 9495, November 28, 1956.*

Exclusion of Uncapitalized Overheads. The Missouri commission excluded any allowance for omissions and contingencies and general overheads in a telephone company's original cost rate base where there was no evidence to support a finding that such costs had been capitalized by the company in the past. *Missouri Pub. Service Commission v. Huntsville Teleph. Co. Case No. 13,345, December 5, 1956; Missouri Pub. Service Commission v. Salisbury Home Teleph. Co. Case No. 13,346, December 5, 1956.*

Weekly Permit Rate Eliminated. The Missouri commission authorized a bus company to eliminate a weekly permit rate where the company had been sustaining substantial losses and it had become apparent that the weekly permit rate had lost some of its promotional advantage. *Re Kansas City Pub. Service Co. Case No. 13,509, November 27, 1956.*

Illegal Forwarding Operations. A United States district court upheld the denial by the Interstate Commerce Commission of an extension of authority requested by a freight forwarder, where the forwarder for some time had been performing the proposed service without authority despite warnings as to the illegality of the operations. *Lifschultz et al. v. United States et al. 144 F Supp 606.*

Res Adjudicata on Interchange Issue. In an action by a carrier raising an issue of where traffic interchange occurred, a New York court ruled that a prior finding by the Interstate Commerce Commission, sustained by a court in proceedings involving the same parties, that the place of interchange was at a specified point was *res adjudicata* on the issue. *New York, S. & W. R. Co. v. Central R. Co. of New Jersey, 156 NYS2d 99.*

Prepay Station Adequate. There was no substantial evidentiary basis for a commission order denying a railroad authority to substitute a prepay station for an agency station, the Mississippi supreme court ruled, where the uncontradicted evidence established that continued operation of the agency station would result in substantial loss to the company and that a prepay station would meet the reasonable needs of the public in the area. *Citizens of Stringer v. Gulf, M. & O. R. Co. 90 So2d 25.*

Jurisdiction to Apportion Crossing Costs. The Wisconsin supreme court agreed with the commission that the commission had no jurisdiction to apportion costs incurred by a railroad in moving automatic electric crossing signals to serve a street crossing which a municipality had made wider if the work had not been ordered by the commission. *Chicago & N.W.R. Co. v. Wisconsin Pub. Service Commission, 79 NW2d 110.*

Bond Issue Authorized. The New York commission authorized an electric company to issue at par for private placement its 4½ per cent first mortgage bonds in order to obtain funds to reimburse the company treasury for statutory expenditures, to finance construction, and to liquidate short-term debt, where, although the new issue would result in an increase of the debt ratio from 49.4 to 55.4 per cent, the earnings would amount to nearly five times the interest charges on long-term debt. *Re Patchogue Electric Light Co. Case 18,034, November 14, 1956.*

Nontoll Interchange Service. Two telephone companies were authorized by the Wisconsin commission to discontinue nontoll unlimited exchange service between certain exchanges where such service was unreasonable and unjustly discriminatory in that the costs were not equitably apportioned to the customers using the service but were borne by all customers irrespective of use. *Re General Teleph. Co. of Wisconsin, 2-U-4689, December 7, 1956.*

"Agricultural Commodities." Overturning a ruling of the Interstate Commerce Commission, a federal district court held that raw shelled nuts are agricultural commodities and not manufactured products of agricultural commodities within the meaning of § 203(b)(6) of the Interstate Commerce Act exempting from certificate requirement vehicles carrying agricultural commodities. *Consolidated Truck Service, Inc. et al. v. United States et al. 144 F Supp 814.*

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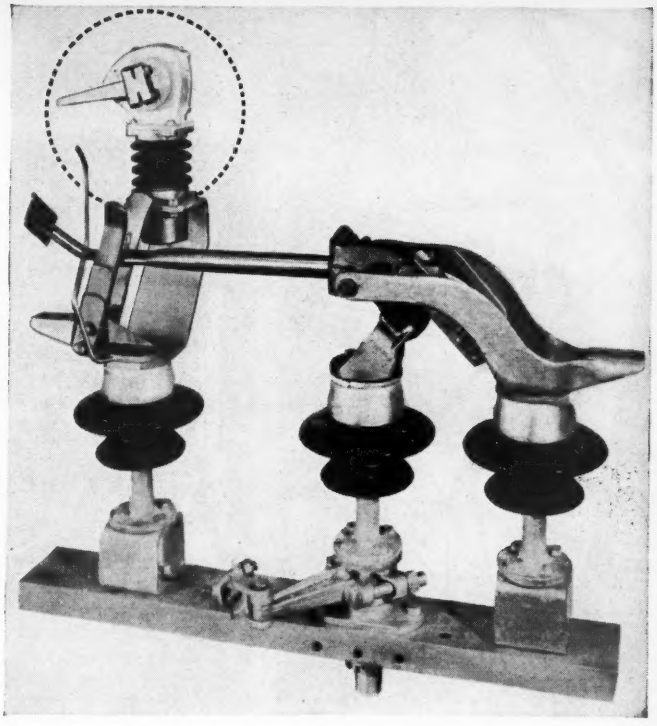

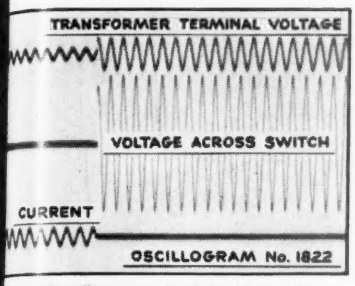

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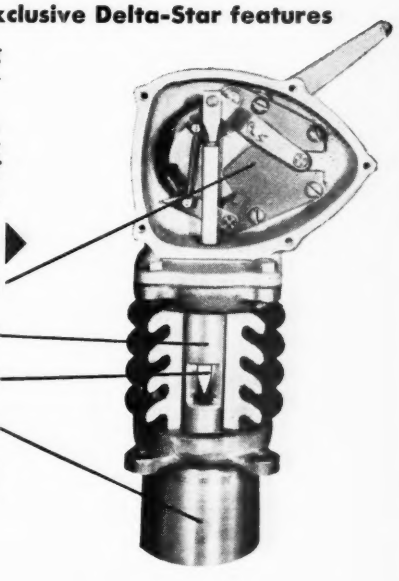

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Industrial Progress

ubled Demand in 1970 Seen By PG&E President

CIFIC Gas and Electric Company ns to double the capacity of the gest and one of the newest of its electric generating plants, accord- to Norman R. Sutherland, presi- t and general manager.

he company plans to add two e 325,000-kilowatt generating ts to the new 660,000-kilowatt tsburg power plant in Contra Costa nty, one in 1960 and the other in 1. Each of the new units is twice as e as the biggest now in service on PG&E system. The Pittsburg nt was completed just two years at a cost of $75,000,000, exclusive transmission facilities.

Addition of 215,000 kilowatts in ts installed in 1956 brought the &E capacity to 4,528,000 kilo- ts, nearly three times the com- y's wartime capacity.

To date the PG&E postwar invest- nt in expanding its gas and electric tems exceeds $1.6-billion. Expan- n costs during 1956 approximate 5,000,000. Mr. Sutherland said ex- sion expenditures in 1957 will ap- ximate $190,000,000.

The new Pittsburg units will bring ditions now under construction or eduled for completion during the t five years to 1,495,500 kilowatts which 625,500 kilowatts is in droelectric projects and 870,000 watts in steam projects.

Mr. Sutherland stated that con- ued growth of electric power re- rements at the present rate would ng total demand to more than 10- llion kilowatts in 1970, as com- ed with a record peak on the PG&E tem this year of 4,025,300 kilo- ts. Such growth will require in- llation of more than 5-million kilo- ts of new capacity for the area in 1960 decade, he declared.

More than 2-million kilowatts in hydroelectric developments are projected by the company and governmental agencies during that period. The remaining 3-million will be in steam plants the company proposes in its construction schedule.

California's growth, the constantly increasing use of electricity by individual customers and the characteristics of the diversified demands on PG&E's power system indicate that the huge units now planned for Pittsburg power plant will become the company's minimum size generating facilities for future capacity additions, Mr. Sutherland stated.

"Our engineering studies indicate," he said, "that savings will be made and that our future load growth will best be met with these very high-pressure, high-efficiency units of large capacity which have been developed recently through the continuing advances in technology being made by the electric industry."

PG&E is engaged in two nuclear-electric developments and hopes that by late next summer its lines will be carrying the first all privately-financed nuclear electric power in commercial service anywhere.

Natural gas requirements are expected to continue growing correspondingly with electric demands and the company plans include the continuing increase of its natural gas supplies and expansion of its gas transmission and service facilities.

Until 1950 all the natural gas requirements of PG&E customers were met with supplies from California fields. Construction of the company's Super Inch line began imports of Texas and New Mexico gas that year. PG&E now is taking deliveries of 750-million cubic feet daily through the Super Inch, constituting about two-thirds of the area's requirements.

Projects under way or now scheduled will increase imports of out-of-state gas to more than one billion cubic feet a day by the winter of 1958-59. The company is developing plans in its long-range program for additional supplies of natural gas beyond that year.

Consumers Power Plans Largest Expansion in History

THE largest construction and expansion program in the history of Consumers Power Company totaling $95,000,000 has been approved for 1957 by the company's board of directors, President Dan E. Karn announced. This exceeds the record budget of 1956 by $4,000,000.

"To keep ahead of our customers' needs for electric and natural gas services we will have to spend more money on expansion of facilities in 1957 than ever before," Mr. Karn said. The company supplies electric service in 61 of the 68 counties in Michigan's lower peninsula, and natural gas service in 30 counties.

Electric projects on the 1957 schedule total more than $64,000,000 and gas department expansion plans call for the investment of about $18,000,000. In addition, about $13,000,000 will be spent on office and service building construction and improvement, and other general projects.

Major electric projects include the completion in 1957 of two new generating units totaling 312,500 kilowatts, and will increase the company's state-wide system capacity to 2,033,000 kilowatts, or 18%.

Construction of the first 250,000 kilowatt unit of the new Dan E. Karn power plant on Saginaw Bay will go forward in 1957, with operation scheduled in 1959.

The capacity of an interconnection between Consumers and The Detroit Edison Company, east of Flint, will be doubled to a total of 200,000 kilowatts to permit larger interchanges of

(*Continued on page 26*)

power between the two companies as circumstances require. There are three interconnections between the two companies.

The company expects to add about 54,000 additional electric and natural gas customers in 1957.

John Yeargain Forms Agency

John Yeargain, formerly an advertising consultant, has formed his own agency. To be known as John Yeargain Inc., the offices will be located at 141 E. 44th street, New York 17, New York.

Electric Appliance and Equipment Output to Reach New Milestone In 1957

THE electrical manufacturing industry will pass a new milestone in 1957 when it will turn out $21½ billion dollars worth of electrical products of all kinds, predicted Joseph F. Miller and A. J. Nesti, managing director and chief statistician, respectively, of the National Electrical Manufacturers Association.

After coming close to the $20 billion mark in 1956 with a record output of $19.6 billion, the industry expects to pass this new level by a wide margin with an overall increase in shipments of ten per cent in 1957.

It is anticipated that all branches of the industry will join in this record performance with increases in sales ranging anywhere from 5 to 15%. In fact, some individual milestones will be passed within the industry itself. For example, output of electric appliances, including radio and television, will pass the $5 billion mark; shipments of electric industrial apparatus will go well over the $3 billion level; and insulated wire and cable and generation, transmission and distribution equipment will each, for the first time, register more than $2 billion worth of sales.

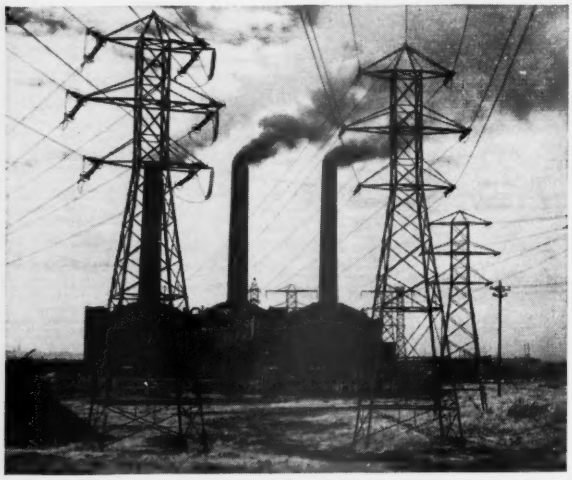
NEMA's year-end study further indicates that shipments of signal and communication equipment will add up to approximately $1½ billion; illuminating equipment almost $1 billion; electrical building equipment and supplies $¾ billion; and electrical insulating materials $440 million—all new record peaks for these branches of the industry.

Another very important segment the industry comprised of a hete geneous group of products rang from electronic components and x- apparatus to batteries and hear aids will account for a very subst tial part—$5½ billion—of the ind try's output in 1957. With the co stant addition and growth of n products, this part of the indust ry h considering the high volume figur one of the highest growth rates, creasing more than 35 per cent— one and one-half billion dollars since 1954.

This vigorous growth of the el trical manufacturing industry, NEMA executives point out, reflec the beneficial effects on the industr activitity of such programs as ho improvement, adequate wiring, man facturing plant modernization a automation, improved lighting, fa and rural electrification and n product development.

With the long-term trend ahead the use of electric energy for all pu poses moving sharply up, the dema

(*Continued on page 29*)



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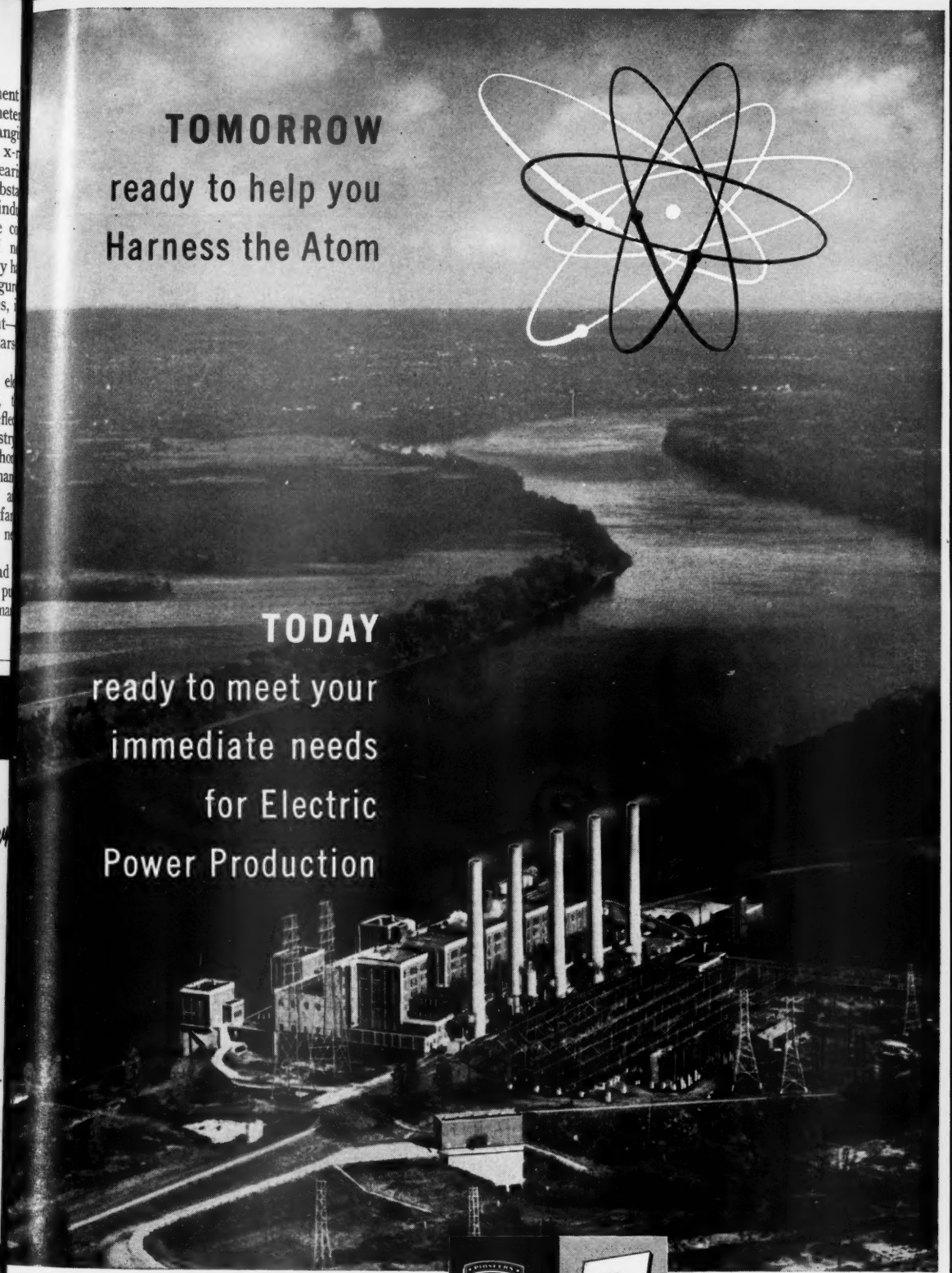

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need for electrical generation, nsmission and utilization equipnt will continue to grow and indus- volume figures can be expected to ch what might now be regarded as ntastic amounts. Meanwhile, the ort-term picture ahead is appreciy optimistic.

Philadelphia Electric to Spend $460 Million in Five Years

NCE World War II, the Philaphia Electric Company has spent 80,000,000 for new construction re than doubling its investment in oduction and distribution equipnt. Forecasts of future area deopment show an increasing upward nd of demands by homes and instry here which will require furer expansion and improvement of mpany facilities at an accelerated e. During the next five years, it is pected the company's expansion ogram will cost $460,000,000, or 4 million a week, which is greater n ever before.

A major project in this program is construction of the new Eddyne station on the Delaware river, ar Chester, now under way. Its first 5,000-kilowatt turbine-generator is nned for operation in 1959. A secd unit of similar size has been dered and is scheduled for service rly in 1960. This station, the last ord in efficiency, represents a sigficant forward step in power proction, utilizing super-critical temratures and pressures to achieve onomies in operation not heretofore ssible. The resources of manufacrers supplying equipment for this w station have been combined with ose of the company to develop exemely advanced equipment designs, me of which will have unique feares. Extensive additions to the comny's electric transmission facilities e under way in order to integrate e new Eddystone station with the esent system.

In addition, installation of a new rbine-generator at Schuylkill station Philadelphia is progressing. This w unit will have a capacity of 175,- 0 kilowatts, and is scheduled for eration in 1958.

Expansion of the company's gas cilities is also an important part of e company's construction program. emands for gas in industry, and parcularly for heating homes, continue increase. A measure of the wide ceptance of this fuel is found in the ct that 43 per cent of the homes hav- g the company's gas service use gas r heating. To meet these demands, extensive additions to distribution mains are being made and construction is in progress of a new gas production plant at West Conshohocken, scheduled for completion next September.

A new steam heating plant in central Philadelphia is being built and mains are being extended to supply new industrial customers, as this company service continues to grow in importance.

Giant Weather Flame Tops Milwaukee Gas Light Building

A GIANT Weather Flame, visible for more than 25 miles, now gives three-color weather forecasts from atop the Milwaukee Gas Light Company headquarters.

Towering more than 24 stories above the streets of Milwaukee, the four-ton Weather Flame spectacular is more than 500 times the height of a flame on an ordinary home cooking range.

The novel $50,000 Flame, which incorporates 1,800 feet of fluorescent tubing, glows red to indicate rising temperatures; gold for cooler weather, and blue for no temperature change. Flashing of any color signifies precipitation. The Flame was designed, engineered and built by Federal Sign and Signal Corporation of Chicago.

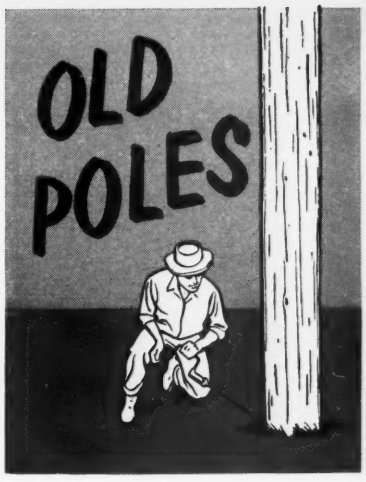
S. Lloyd Nemeyer, president of the Milwaukee Gas Light Company, said the Weather Flame was selected as a symbol of the company's public service to the Milwaukee community.

The Weather Flame is 21 feet high and 9 feet in diameter, and weighs four tons. It is enclosed in a translucent "skin" of quarter-inch plastic, which makes the entire Flame come alive with light when illuminated from within by the curved multiple rows of tubing.

Built to withstand winds of more than 120 miles an hour velocity, the novel Weather Flame has a built-in ventilating system which keeps the fluorescent tubing at least 20 degrees below summer temperatures. In winter, the tubing and transformers, by their normal operations, generate enough heat to allow the Weather Flame to withstand sub-zero outside temperatures.

The giant Weather Flame is mounted atop a building which itself was designed to convey a visual suggestion of the shape of a huge gas flame. The color of the building's brick is graduated in shade and the setbacks are created to capture the spirit of a gas flame.

(*Continued on page* 31)



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● Your Company can avoid the triple hazards centering on human safety, continuity of service and expensive unnecessary replacement of standing poles. Every one of your standing poles older than 18 to 20 years should be systematically inspected and treated at the groundline area.

● In the average system, more than 50% of poles are 20 years old or more. To depend on these old poles without adequate care and attention would appear to be a serious risk . . . and this risk can be corrected.

● A comprehensive program of groundline inspection and treatment by a company with thoroughly experienced personnel is the answer. A program such as this should apply to most older pines . . . cedars . . . chestnuts and other common pole species.

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300	8,800 lbs.	—	204
400	15,000 lbs.	26,000 lbs.	197
500	18,000 lbs.	32,000 lbs.	197
600	21,000 lbs.	35,000 lbs.	197
700	23,000 lbs.	45,000 lbs.	216
800	25,000 lbs.	55,000 lbs.	222
900	30,000 lbs.	65,000 lbs.	232
Forward-Control Models			
P300	9,000 lbs.	—	204
P500	15,000 lbs.	—	204
C.O.E. Models			
C500	18,000 lbs.	32,000 lbs.	197
C600	21,000 lbs.	35,000 lbs.	197
C700	22,500 lbs.	45,000 lbs.	216
Tandem Models			
T700	32,000 lbs.	45,000 lbs.	216
T800	36,000 lbs.	55,000 lbs.	222
T900	46,000 lbs.	65,000 lbs.	232

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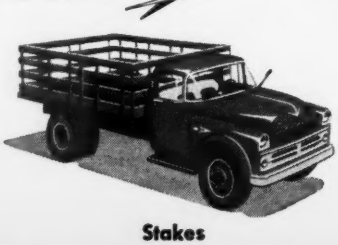

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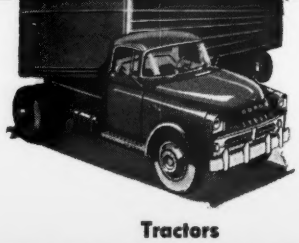

Tractors

Gen. Tel. of Southwest Has $14,200,000 Program

record 1957 construction budget $14,200,000 for General Telephone mpany of the Southwest was an- unced recently. The 1957 budget is 20 per cent increase over the 1956 dget.

W. G. Wright, president of the mpany, said the largest expenditure ll be for outside plant—poles, cable d wire—to extend the company's cilities in the 233 exchanges in hich it operates. About $5,500,000 earmarked for this purpose.

Approximately $4,300,000 is budg- ed for central office equipment, ,800,000 for station equipment, $1,- 0,000 for land and buildings, and 90,000 for vehicles and furniture.

Mr. Wright pointed out that the mpany will convert 25 of its ex- anges to dial operation during the ar, will establish three new ex- anges, and will replace equipment eight other exchanges. At the end 1957, 83 per cent of the company's lephones will be dial operated. An- ipated gain in telephones for 1957 15,500.

General Telephone Company of the uthwest operates 195,000 tele- hones in Texas, New Mexico, Okla- oma, Arkansas and Louisiana and the largest Independent (non-Bell) lephone company in the Southwest. Considering construction budgets the Texas Telephone Company nd Oklahoma Telephone Company (other General System companies), the total construction budget for all three General Telephone System companies in the Southwest is $18,- 400,000.

$28,000,000 Expenditure Planned By Delaware Power & Light

H. H. PLANK, president of Dela- ware Power & Light Company re- cently announced the authorization of expenditures totaling more than $28,- 000,000 for construction projects throughout the Delmarva Peninsula during 1957.

A major item in this construction program is the completion of the first of two 80,000 kilowatt generating units in the new Indian River power station between Millsboro and Dags- boro in southern Delaware. This unit is scheduled for operation about November 1, 1957. Work is also underway and will continue through- out 1957 and 1958 on the second 80,- 000 kilowatt unit at Indian river which is presently scheduled for completion about December 1, 1958. Also sched- uled for construction during 1957 is a new service building near Salisbury, Maryland which is expected to be completed in the summer of 1958.

"Generally speaking," Mr. Plank said, "other major items in the 1957 construction program amount to a general 'firming up' of our system. Additional substations, transmission lines of higher voltage, distribution lines, transformers, new gas transmis- sion, distribution mains and services to additional customers throughout our service areas make up the bulk of the remaining expenditures planned for 1957."

Southern California Edison Plans $60,000,000 Plant

SOUTHERN California Edison Company has applied to the California Public Utilities Commission for per- mission to build a $60,000,000 steam generating plant near Oxnard in Ven- tura county, California.

The plant, to be called the Mana- dalay steam station, would consist in- itially of two units capable of gen- erating a total of 400,000 kilowatts. If permission is granted construction will start early next spring. The first of the two units would go in service in March, 1959, and the second in September, 1959.

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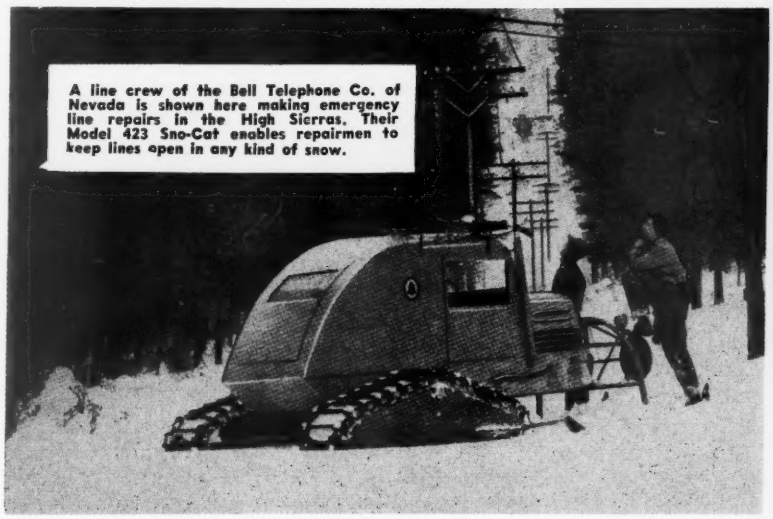

A line crew of the Bell Telephone Co. of Nevada is shown here making emergency line repairs in the High Sierras. Their Model 423 Sno-Cat enables repairmen to keep lines open in any kind of snow.

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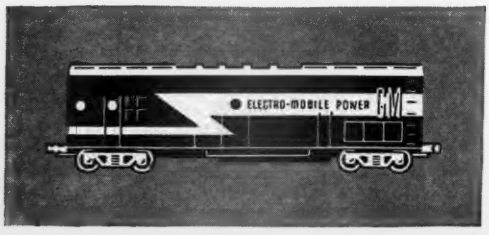
In addition, Electro-Mobile Power offers an immediate source of emergency power to areas that might otherwise be without service for a long period of time. Used in multiple, there is no limit to the amount of power these units can supply.

The savings from Electro-Mobile Power are many. Rebuilding or maintenance work of any duration can be handled during regular working hours. Work goes faster, in greater safety, and most important—customer relations and income are maintained during the temporary outage.

A planned outage is no outage with Electro-Mobile Power. Its many advantages are helping to reduce costs and improve service for many utilities. It can do the same for your system. Your Electro-Motive representative will be glad to show you how.

Here's how one Midwestern utility company uses its Electro-Mobile trailer . . .

In a span of twelve months, this utility used its Electro-Mobile trailer on fifteen different jobs. Shown here are some examples of the work completed and in progress with this unit. During the year the mobile trailer was operated over 340 hours. On one job alone, it was used 145 hours, delivering 58,500 KWH.



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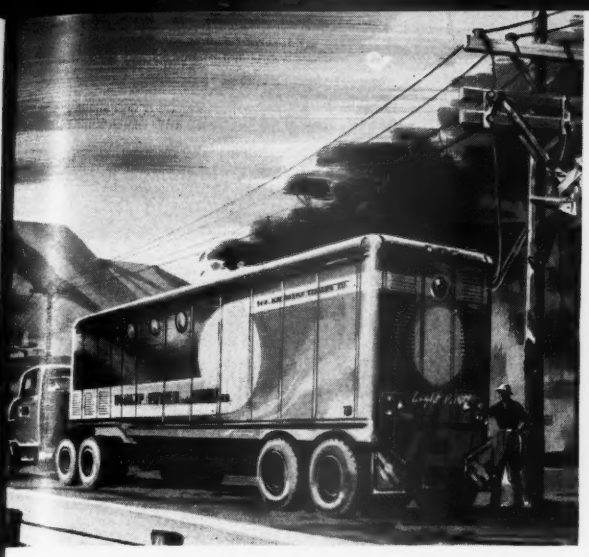
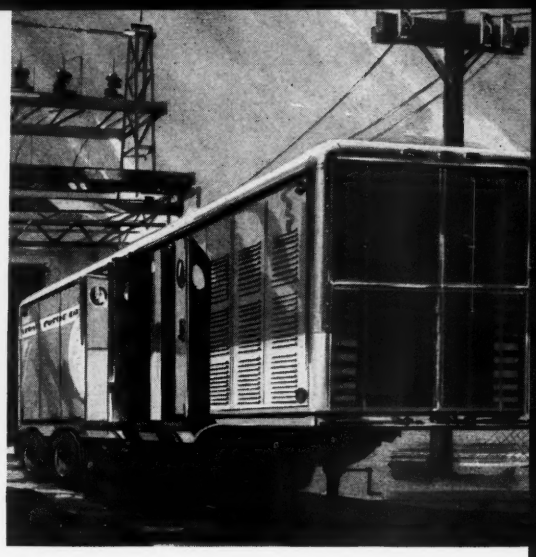
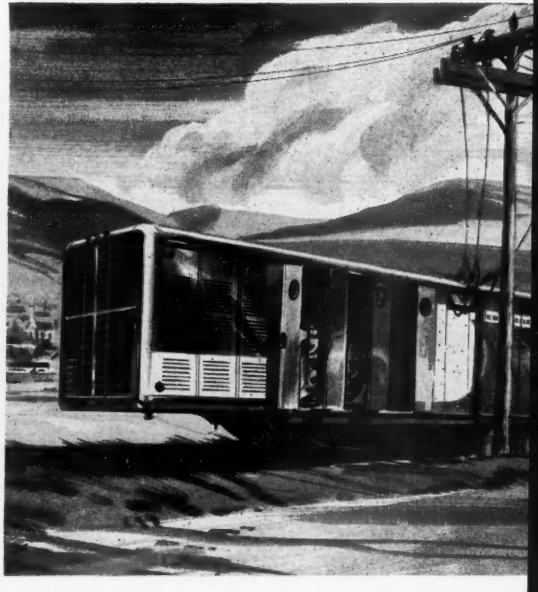


Relocating 12,400-volt line for new highway.
Hours used: 68 ¼ KWH generated: 22,700



Installation of new transformer for substation.
Hours used: 3 ½ KWH generated: 1,100

Feeding 12,400-volt sub-transmission line while stringing new conductors on transmission line.
Hours used: 145 KWH generated: 58,500



Handling daily peaks while existing transmission line and substation are being rebuilt.
Houts used: daily average 4

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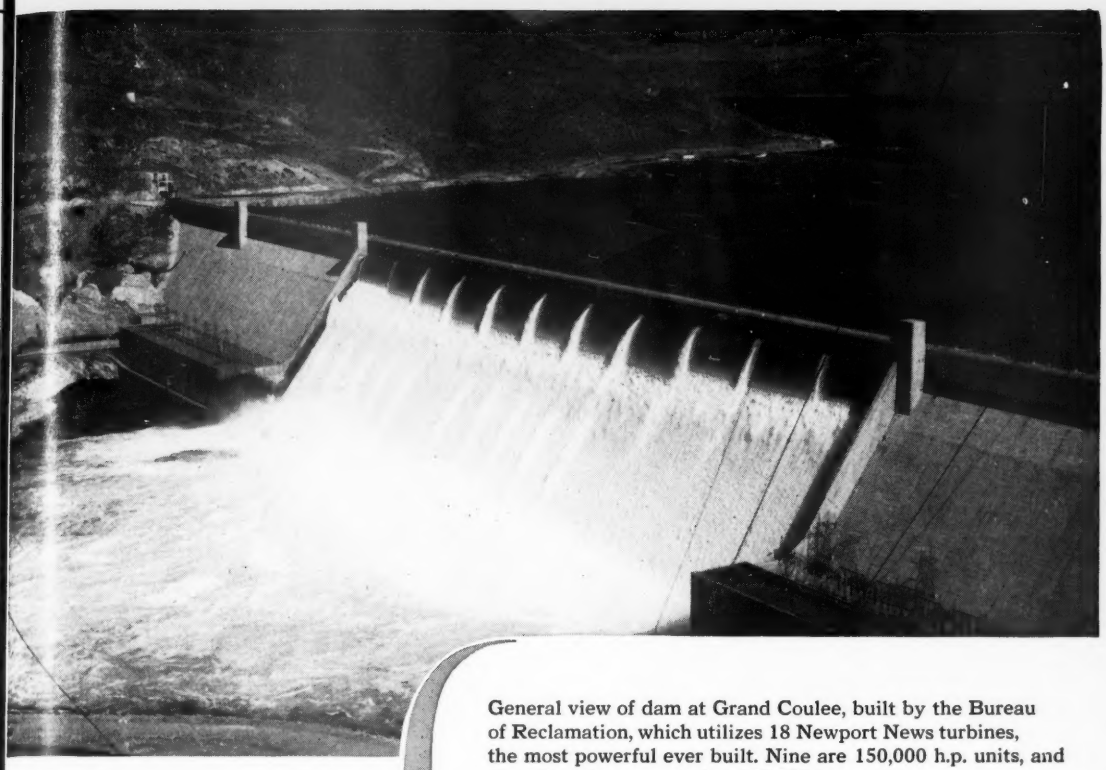

General view of dam at Grand Coulee, built by the Bureau of Reclamation, which utilizes 18 Newport News turbines, the most powerful ever built. Nine are 150,000 h.p. units, and the other nine are rated at 165,000 h.p. each.

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Turbines designed and built for the world's largest development at Grand Coulee... and for other hydroelectric installations in America and various parts of the world... bespeak the skill and facilities offered by Newport News.

This trained organization has filled hydroelectric turbine contracts with an aggregate rated output of 7,000,000 horsepower.

Other equipment designed and built by Newport News includes penstocks, pressure regulators, valves, pumps, gates and rack rakes. Upon request, a copy of our illustrated booklet entitled "WATER POWER EQUIPMENT" will be sent to you.

Typical Users of Newport News Equipment

PLANT	LOCATION
Boone	Tennessee
Buchanan	Texas
Caonillas	Puerto Rico
Chief Joseph	Washington
Clark Hill	South Carolina
Deer Lake	Newfoundland
Folsom	California
Fort Patrick Henry	Tennessee
Hiwassee	Tennessee
Hoover	Nevada
J. H. Kerr	Virginia
Jim Woodruff	Florida
Lower Salmon	Idaho
Norris	Tennessee
Rock Creek	California
Santee-Cooper	South Carolina
C. J. Strike	Idaho
Whitney	Texas
Wilson	Alabama

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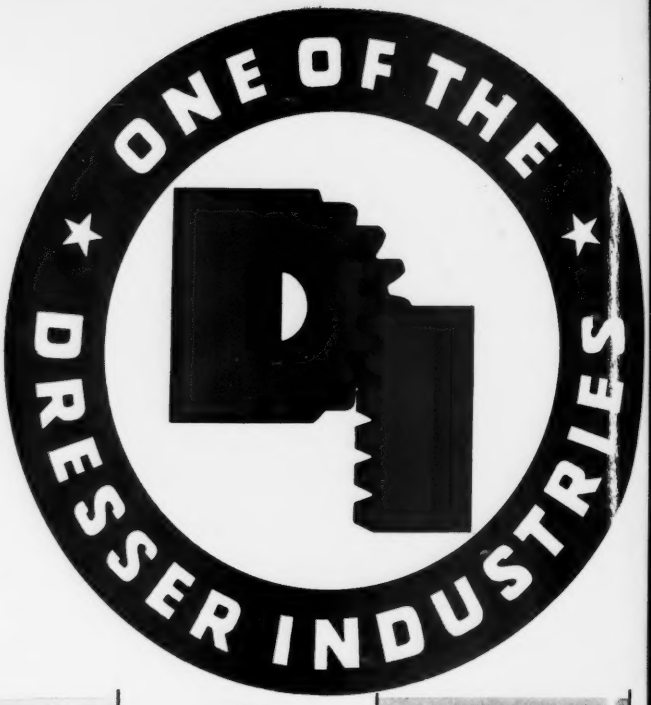

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PACIFIC PUMPS, INC. pumps	ROOTS-CONNERSVILLE BLOWER DIVISION blowers	SECURITY ENGINEERING DIVISION drilling bits	SIE SOUTHWESTERN INDUSTRIAL ELECTRONICS electronic instrumentation

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